THE FORMER WILLOW STREET STATION MANUFACTURED GAS PLANT SITE, 1640 NORTH KINGSBURY PORTION CHICAGO, ILLINOIS

SUPPLEMENTAL SITE INVESTIGATION REPORT/ REMEDIATION OBJECTIVES REPORT/ REMEDIAL ACTION PLAN

Prepared for

THE PEOPLES GAS LIGHT and COKE COMPANY

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EXECUTIVE SUMMARY

In conformance with the Illinois Environmental Protection Agency (Illinois EPA) Site Remediation Program (SRP), defined in Chapter 35 of the Illinois Administrative Code (IAC), Part 740, The Peoples Gas Light and Coke Company (Peoples Gas) engaged Burns & McDonnell to complete this *Supplemental Site Investigation/Remediation Objectives Report/Remedial Action Plan* (SSI/ROR/RAP) for the 1640 North Kingsbury portion of the former Willow Street Station manufactured gas plant (MGP) property in Chicago, Illinois (Site). This SSI/ROR/RAP summarizes SSI activities and findings at the Site, presents recognized environmental conditions and related impacts identified on the Site, and develops applicable remediation objectives (ROs) and remedial actions in accordance with the Tiered Approach to Corrective Action Objectives (TACO) presented in 35 IAC, Part 742.

The Site is located at the intersection of Willow Street and North Kingsbury Street in Section 32, Township 40 North, Range 14 East in the City of Chicago, Cook County, Illinois. The former Willow Street Station MGP was approximately 5.5 acres and was located on three parcels of land. One parcel of the former Willow Street Station was located east of Kingsbury Street and the other two parcels were located west of Kingsbury Street adjacent to the North Branch of the Chicago River (River). The Site is located on the western portion of the former Willow Street Station. The Site occupies approximately 3.4 acres and is bounded to the north and south by industrial/commercial properties; to the east by the Chicago, Milwaukee and St. Paul Railroad and Kingsbury Street; and to the west by the North Branch of the Chicago River. The Site address is 1640 North Kingsbury Street, Chicago, Illinois. The Site is owned by GI North Property, LLC (GI North) and is occupied by General Iron Industries, Inc. (GI) for use as a laydown area for unprepared steel. The ground surface is unpaved, most of the original aboveground gas plant structures have been removed and a chain-link fence exists along Kingsbury Street.

Comprehensive site investigation (SI) activities, including but not limited to collection and analyses of soil and groundwater samples, were conducted in February and March 2002. The results of the SI are presented in the *Comprehensive Site Investigation Report, The Former Willow Street Manufactured Gas Plant Site, 1640 North Kingsbury Portion* (SI Report) (Burns & McDonnell 2005a) and the *Comprehensive Site Investigation Sampling Data, The Former Willow Street Manufactured Gas Plant Site, 1640 North Kingsbury Portion* (Burns & McDonnell 2005b). The SI Report established that the subsurface consisted of silty clay overlain by fill and that perched groundwater at the Site met the regulatory definition of a Class II resource groundwater. The SI Report concluded that source material and soil and groundwater exceeding TACO Tier 1 ROs for certain constituents were present at the Site. The SI Report was conditionally approved by the Illinois EPA in May 2005.

In November and December 2004, Burns & McDonnell conducted SSI activities along the River. The objective of the investigation was to collect additional data in order to further define the nature and extent of impacts along the River. The SSI included the advancement of 14 soil borings, the advancement of three geotechnical soil borings, and the excavation of two test pits.

A TACO Tier 1 residential land use and construction worker evaluation, including non-TACO chemicals that were obtained from tables that are dated October 1, 2004 from the Illinois EPA website (Illinois EPA 2004), was performed on the data obtained from the SI and SSI and concluded the following:

- Benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, total polychlorinated biphenyls (PCBs), arsenic, chromium, and lead concentrations exceeded Tier 1 soil ingestion ROs.
- Benzene, naphthalene, and chromium concentrations exceeded Tier 1 soil inhalation ROs.
- Benzene, ethylbenzene, carbazole, 2-methylnaphthalene, 4-methylphenol, benzo(a)anthracene, naphthalene, total chromium, toxicity characteristic leaching procedure (TCLP) lead, and total selenium concentrations exceeded Tier 1 soil migration to Class II groundwater ROs.
- Benzene, benzo(a)anthracene, copper, lead, and thallium concentrations exceeded the Tier 1 Class II groundwater ingestion ROs.

In addition, the following source material areas were identified based on conservative default parameters presented in TACO:

- The former tar wells;
- The former 100,000-ft³ gas holder;
- The former 420,000-ft³ gas holder;
- The center of the former 17,000,000-ft³ gas holder, north of the former tar wells;
- The vicinity of the possible location of the west valve/weir box;
- The area west of the 17,000,000-ft³ gas holder, along the River; and
- The area located on the southern portion of the Site, along the River.

A shallow surface soil area that contained a total PCB concentration of 55.6 milligrams per kilogram (mg/kg) was remediated on behalf of the Site owner in April 2004 pursuant to the United States Environmental Protection Agency's (USEPA's) self-implementing cleanup and disposal option under Title 40 of the Code of Federal Regulations (CFR) Part 761.61 as presented in the SI Report (Burns & McDonnell 2005a).

Further evaluation of benzene, ethylbenzene, carbazole, benzo(a)anthracene, naphthalene and TCLP lead in soil was conducted to estimate groundwater concentrations at the River. Predicted impacts to groundwater at the River were less than the applicable groundwater ROs and surface water quality standards.

Further evaluation of the groundwater ingestion exposure route was conducted using site-specific data to estimate the benzene, benzo(a)anthracene, copper, lead, and thallium concentrations at the River associated with measured concentrations in samples collected from groundwater monitoring wells on site. Predicted impacts to offsite groundwater and surface water are well below applicable groundwater and available surface water quality standards.

A Tier 3 risk evaluation was performed to evaluate the property for residential land use and to evaluate both construction and utility workers outside the 30-foot River setback area. The evaluation was conducted using limited data sets from soil samples that will not be removed during remediation. The Tier 3 risk evaluation was performed to establish the proposed set of assumptions and variables for the completion of a formal Tier 3 risk assessment under TACO Section 742.915 following remedial activities. Analytical data from remaining SI and SSI sample locations that were not proposed to be remediated outside of the 30-foot River setback area and confirmation soil samples will be used to fully evaluate risk once the property is restored.

Remediation objectives for the Site were developed and evaluated in accordance with TACO using the Tier 1 and Tier 3 evaluations. These evaluation and Site conditions indicated that corrective action was required. The following remediation goals have been established for the Site:

Outside of the 30-foot Setback along the North Branch of the Chicago River

- Eliminate source material at the Site to the extent practical by removal of source material;
- Prevent exposure to residential, utility and construction worker receptors via the soil ingestion and inhalation exposure routes by removal of the impacted soil to levels established in the Tier 3 risk evaluation included in the SSI/ROR/RAP and develop a post-removal Tier 3 risk assessment to be presented in the Remedial Action Completion Report (RACR); and
- Prevent ingestion of groundwater at the Site by relying on the City of Chicago ordinance prohibiting the installation of potable groundwater wells in the future.

Within the 30-foot Setback along the North Branch of the Chicago River

- Eliminate source material at the Site to the extent practical by removal of source material;
- Prevent exposure to residential and construction worker receptors via the soil ingestion and inhalation exposure routes by a combination of the following:
 - removal of impacted soil to meet Tier 1 ROs
 - installation of an engineered barrier in the setback zone, as needed to meet Tier 1 ROs; and
- Prevent ingestion of groundwater at the Site by relying on the City of Chicago ordinance prohibiting the installation of potable groundwater wells in the future.

In general, remedial activities will include Site preparation; waste characterization; ambient air monitoring; excavation, stockpiling and off-site disposal and backfilling; confirmation sampling; management of decontamination and excavation water; and demobilization and Site restoration.

All excavated soil will be disposed of at an Illinois-approved Subtitle C and/or Subtitle D landfill. All excavation areas will be backfilled to grade with non-impacted imported soil, sand, stone aggregate, coarse aggregate, or a combination thereof.

* * * * *

1.0 INTRODUCTION

In conformance with the Illinois Environmental Protection Agency (Illinois EPA) Site Remediation Program (SRP), defined in Chapter 35 of the Illinois Administrative Code (IAC), Part 740, The Peoples Gas Light and Coke Company (Peoples Gas) engaged Burns & McDonnell to complete this *Supplemental Site Investigation/Remediation Objectives Report/Remedial Action Plan* (SSI/ROR/RAP) for the 1640 North Kingsbury portion of the former Willow Street Station manufactured gas plant (MGP) property in Chicago, Illinois (Site). This SSI/ROR/RAP summarizes SSI activities and findings at the Site, presents recognized environmental conditions and related impacts identified on the Site, and develops applicable remediation objectives (ROs) and remedial actions in accordance with the Tiered Approach to Corrective Action Objectives (TACO) presented in 35 IAC, Part 742. The TACO evaluation for the Site consists of the following approaches:

- A Tier 1 evaluation of residential property and potential risks, if any, to construction workers.
- Source material evaluation.
- Further evaluation of the soil migration to groundwater and groundwater ingestion exposure pathways.
- A Tier 3 risk evaluation to establish scenarios, human exposure factors (both assumptions and default values) and toxicity values proposed for the completion of a formal Tier 3 risk assessment following remedial activities.
- Development of ROs and remedial actions.

1.1 PURPOSE AND ORGANIZATION OF THE SSI/ROR/RAP

The purpose of the SSI/ROR/RAP is to summarize SSI activities and findings, evaluate exposure pathways and develop corrective measures to eliminate exposure to any impacts. This report presents and discusses site-specific ROs and remedial actions as outlined below:

• Section 1.0 – Introduction

This section describes the purpose and organization of the SSI/ROR/RAP and summarizes relevant background information, SSI information, and recognized environmental conditions.

• Section 2.0 – Summary of Tier 1 Evaluations

This section presents land and water uses and summarizes Tier 1 evaluations for a residential land use and a construction worker.

• Section 3.0 – Exposure Route Evaluation

This section identifies source material, if any, and determines whether each exposure route may be excluded from further evaluation.

• Section 4.0 – Further Evaluation

This section further evaluates the soil migration to groundwater and groundwater ingestion exposure pathways by performing a further evaluation and predicting impacts, if any, at the North Branch of the Chicago River (River). In addition, a Tier 3 risk evaluation was conducted to further evaluate the soil ingestion and inhalation exposure routes for residential property, utility workers, and construction workers.

- Section 5.0 Remediation Objectives and Remedial Actions

 This section identifies ROs and describes remedial actions proposed to achieve those objectives.
- Section 6.0 References

1.2 SITE DESCRIPTION

The Site is located at the intersection of Willow Street and North Kingsbury Street in Section 32, Township 40 North, Range 14 East in the City of Chicago, Cook County, Illinois. Figure 1 presents the Site location map. The former Willow Street Station MGP was approximately 5.5 acres and was located on three parcels of land. One parcel of the former Willow Street Station was located east of Kingsbury Street and the other two parcels were located west of Kingsbury Street, adjacent to the River. Figure 2 presents the Site layout map.

The Site is located on the majority of the western portion of the former Willow Street Station. The Site occupies approximately 3.4 acres and is bounded to the north and south by industrial/commercial properties (including Demco Metals, Inc. to the north and a storage yard to the south); to the east by the Chicago, Milwaukee and St. Paul Railroad and Kingsbury Street beyond which is a Commonwealth Edison transformer station, a Peoples Gas regulator station and commercial properties; and to the west by the River. The Site address is 1640 North Kingsbury, Chicago, Illinois. The Site is owned by GI North Property, LLC (GI North) and is occupied by General Iron Industries, Inc. (GI) for use as a laydown area for unprepared steel.

1.3 SITE HISTORY

According to available information, the Ogden Gas Company constructed the former Willow Street Station between approximately 1895 and 1897. The coal gasification plant was operated to supply low British thermal unit (BTU) gas to residential, commercial and industrial customers. At that time, a 420,000-cubic foot (ft³) gas holder, a 100,000-ft³ gas holder, a 70,000-gallon oil tank, a 73,000-gallon oil tank, a 158,000-gallon tar tank, hydrometers, a coal shed, generators, and two tar wells were on the Site. Gas was produced using the carburetted water gas method, which is a modification to the blue gas methods. In 1907, Peoples Gas began leasing the property from Ogden Gas Company. Production and the station were shut down between 1910 and 1921. In 1938, most of the aboveground structures were dismantled, and in 1944, the original gas holders were dismantled. Peoples Gas began leasing portions of the former Willow Street Station in 1944 and selling portions in 1947. Between 1949 and 1951, Peoples Gas leased a portion of the Site to Construction Aggregates Company, later Material Services Corporation and E. L. Hedstrom Coal Company for the storage of construction-related materials and coal.

In 1953, Peoples Gas began distributing natural gas and the Site was reactivated as a storage and distribution station. A 17,000,000-ft³ tar-sealed (waterless) gas holder was constructed over part of the former production facilities, located on the western portion of the former Willow Street Station, to accommodate the natural gas distribution system. The diameter of the gas holder was approximately 255 feet with a maximum height of approximately 339 feet. The 17,000,000-ft³ gas holder was retired in

1972. Underground portions of the gas holder are present. Since 1988, GI or GI North has owned the majority of the western portion of the former Willow Street Station, and GI has used the property as a laydown area for unprepared steel.

1.4 SITE INVESTIGATIONS

1.4.1 Previous Investigations

In 1991, Hanson Engineers Incorporated (HEI) conducted a preliminary site investigation (SI) at the former Willow Street Station. The results are contained in a report entitled *Preliminary Site Investigation, Willow Street Station Gas Production and Storage Facility, Chicago, Illinois* dated

November 1991 (HEI 1991). The objective of the preliminary SI was to determine the potential for impacts, if any, associated with the Willow Street Station. The investigation covered the entire 5.5 acres (including both the west and east portions). The investigation included a review of the environmental setting, historical documents provided by Peoples Gas, Sanborn maps, and a water well survey. The report concluded that most of the original gas plant buildings had been removed at the Site; below ground portions of the gas holders could contain residual tars, if not removed during demolition of the gas plant; groundwater was not used within a one-mile radius of the Site; and no municipal wells were located within a one-mile radius (HEI 1991).

Burns & McDonnell conducted SI field activities in February and March 2002. A total of 18 soil probes and 21 soil borings were advanced at various locations at the Site. Surface and subsurface soil samples were collected from soil probe and boring locations using direct push sampling equipment and hollow stem augering equipment. Soil samples were analyzed for target compound list (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), priority pollutant metals, barium, and total cyanide. Certain samples were also analyzed for toxicity characteristic leaching procedure (TCLP) Resource Conservation and Recovery Act (RCRA) metals, reactive cyanide, reactive sulfide, flashpoint/BTU, and soil pH. In addition, eight soil samples were analyzed for total petroleum hydrocarbons (TPH), one surface soil sample was analyzed for TCLP lead and synthetic precipitate leaching procedure (SPLP) lead, and one subsurface soil sample was analyzed for TCLP chromium and SPLP chromium. Physical laboratory tests were performed on two subsurface soil samples. Five 2-inch temporary groundwater monitoring wells were installed at the Site. Groundwater samples were collected from three of the five temporary monitoring wells. Two monitoring wells were not sampled due to insufficient water volume during SI activities. The groundwater samples were analyzed for TCL VOCs, TCL SVOCs, PCBs, priority pollutant metals, barium, total cyanide, and pH. Figure 3 presents the soil boring/probe and monitoring well sample location map.

The results of the SI are presented in the *Comprehensive Site Investigation Report, The Former Willow Street Manufactured Gas Plant Site, 1640 North Kingsbury Portion* (SI Report) (Burns & McDonnell 2005a) and the *Comprehensive Site Investigation Sampling Data, The Former Willow Street Manufactured Gas Plant Site, 1640 North Kingsbury Portion* (Sampling Data) (Burns & McDonnell 2005b). The SI Report established that the subsurface consisted of silty clay overlain by fill and that perched groundwater at the Site met the regulatory definition of a Class II resource groundwater. The SI

Report concluded that source material and soil and groundwater that exceeded TACO Tier 1 ROs for certain constituents were present at the Site. The SI Report was conditionally approved by Illinois EPA in May 2005, pending further delineation of impacts and inclusion of constituents not-in-TACO in the Tier 1 evaluations. The chemicals not-in-TACO were obtained from tables that are dated October 1, 2004 from the Illinois EPA website (Illinois EPA 2004).

1.4.2 Supplemental Site Investigation

In November and December 2004, Burns & McDonnell conducted SSI activities along the River. The objective of the SSI was to collect additional data to further define the nature and extent of impacts along the River. The SSI included the advancement of 14 soil borings, the advancement of three geotechnical soil borings, and the excavation of two test pits. Figure 4 presents the SSI soil boring and test pit locations. Appendix A contains the SSI photo log.

Subsurface soil samples were collected using hollow stem augering equipment. Boring locations were continuously sampled using 2-foot long, 2-inch stainless steel split spoons. Each sample interval was field screened for VOCs using a photoionization detector (PID), and select samples were collected for laboratory analysis. Visual observations of soil type and condition were recorded on drilling log forms. Field classification included principal and minor constituents, observed moisture (if any), soil color, soil texture, PID readings and impacts to the soil. Appendix B contains the SSI soil boring logs.

A stainless steel knife was used to facilitate sample collection from split spoons. Carryover material from previous sampling intervals was removed before sampling. A total of 30 subsurface soil samples were collected from 6 to 22 feet below ground surface (bgs). Soil samples were analyzed for TCL VOCs, TCL SVOCs, and TPH. Table 1 presents the soil analytical results from the SSI. Appendix C contains the SSI sampling data validation memorandum and analytical data. The TACO evaluation of the analytical data obtained during the SSI is discussed in Sections 2.0 and 3.0.

The two test pits were excavated using a track mounted excavator to evaluate the location and condition of the former structures along the River. The test pit size was minimized to the extent practical. Test pits were excavated to a maximum depth of 5 feet bgs. Test pit TP01 was excavated in the west central portion of the Site to identify the location and condition of three former structures. A brick wall, apparently intact, was observed at the north end of the test pit. In the central portion of TP01 a concrete slab was encountered at approximately 4 feet bgs. Fill material consisting of crushed stone, sand, and clay was encountered above the concrete slab. The fill material was visibly impacted with black staining and some areas were also tar coated. Test pit TP02 was excavated approximately 35 feet west of TP01. An abandoned pipe leading to the former 158,000 gallon tar tank was identified. In addition to the abandoned pipe, a metal bottom of the assumed former 158,000 gallon tar tank was also uncovered. Fill material consisting mostly of clay crushed stone, brick, concrete and sand was encountered above the abandoned pipe and former 158,000 gallon tar tank. The fill material was visibly impacted and in some areas near the abandoned pipe and fill material was tar coated within the former 158,000 gallon tar tank.

In addition to the environmental sampling conducted, three borings were advanced to collect geotechnical data. Appendix B contains the geotechnical boring logs (GT01-GT03).

1.5 SITE GEOLOGY AND HYDROGEOLOGY

Based on subsurface investigation conducted during the SI and SSI, the Site consists of silty clay overlain by fill material. The fill unit consists primarily of clay, silty clay, silty sand, sand and gravel with smaller amounts of sandy clay, crushed brick, concrete, wood fragments, cinders, coal, and glass fragments, and was encountered at depths ranging from 2 to 18 feet bgs. Based on borings advanced during the SSI, the fill unit extended to depths of 6 to 18 feet bgs with native silty clay immediately below the fill. The native layer of moderate brown/gray silty clay was encountered at depths ranging from 2 to 18 feet bgs across the Site. In addition, traces of sand and gravel were noted in the native silty clay at the Site. The native silty clay layer was described as brown silty clay, some/trace coarse to fine sand and trace fine gravel from grain size testing. The relative consistency of the unit was variable, ranging from soft to very stiff, and appeared to decrease with depth, then become stiff to very stiff at 35 feet bgs and below.

Groundwater was encountered in 39 soil probe and boring locations at the Site. The depth to water varied throughout the Site from 3 to 16 feet bgs. Water was most often encountered in the silty clay, where the depth to water varied from 7.5 to 16 feet bgs. However, water was encountered in fill material at boring locations adjacent to the river, where the depth to water ranged from 2 to 11.5 feet bgs. Water was encountered within fill in seven of the soil probe or boring locations, all located within the former 17,000,000-ft³ gas holder, at depths of 3 to 6 feet bgs. Water was encountered within silty sand or sand in three probes outside the former 17,000,000-ft³ gas holder, at depths ranging from 4 to 5 feet bgs. Former structures and roads are believed to have an effect on the overall hydrogeology of the Site by acting as barriers to prevent or retard groundwater discharge to the River. Based on groundwater elevations and water levels of the River, it is likely that groundwater at the Site flows in the general direction of the River and some groundwater at the Site discharges into the River.

1.6 RECOGNIZED ENVIRONMENTAL CONDITIONS

Based on laboratory analytical results and field observations, as presented in the SI Report (Burns & McDonnell 2005a) and obtained during the SSI, the following constituents were detected at the Site:

- Surface soil contained concentrations of TCL VOCs, TCL SVOCs, PCBs, metals, and total cyanide.
- Subsurface soil contained concentrations of TCL VOCs, TCL SVOCs, PCBs, metals, and total cyanide.
- Groundwater contained concentrations of TCL VOCs, TCL SVOCs [polynuclear aromatic hydrocarbons (PAHs) only], PCBs, metals, and total cyanide.

In addition, source material was identified at the Site based on visual observations and analytical results. The following source material areas were identified:

- The former tar wells;
- The former 100,000-ft³ gas holder;
- The former 420,000-ft³ gas holder;
- The center of the former 17,000,000-ft³ gas holder, north of the former tar wells;
- The vicinity of the possible location of the west valve/weir box;
- The area west of the 17,000,000-ft³ gas holder, along the River; and
- The area located on the southern portion of the Site, along the River.

A shallow surface soil area that contained a total PCB concentration of 55.6 milligrams per kilogram (mg/kg) (soil sample SP40-001) was remediated on behalf of the Site owner in April 2004 pursuant to the United States Environmental Protection Agency's (USEPA's) self-implementing cleanup and disposal option under Title 40 of the Code of Federal Regulations (CFR) Part 761.61 as presented in the SI Report (Burns & McDonnell 2005a).

* * * * *

2.0 TIER 1 EVALUATIONS

This section presents a Tier 1 evaluation of all analytical data results in accordance with TACO for residential land use and a construction worker. The Tier 1 evaluations compare analytical data from the SI and the SSI to the appropriate Tier 1 ROs. Twelve soil samples (SP10-001, SB18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58B-003) met the regulatory definition of source material, which is discussed in detail in Section 3.1. Soil samples identified as source material were not included in the Tier 1 evaluation. Figure 5 presents the soil probe, boring, and monitoring well location map.

2.1 LAND USE

The Site is located in a district zoned as a planned manufacturing district (PMD) and planned development (PD) (City of Chicago 2004). Figure 6 presents the surrounding area map. Land use in the area is commercial and industrial. The Site is currently used as a laydown area for unprepared steel and is unpaved. A chain-link fence exists along Kingsbury Street at the Site. The PMD allows certain recreational uses, as well as commercial and industrial uses. Future use of the Site and surrounding property is uncertain based on trends of development in the area.

At present, the Site is surrounded by PD zoning to the south; the River to the west; PD and PMD to the east; and PMD to the north. However, this TACO Tier 1 evaluation is based on a future residential land use.

2.2 WATER USE

The Site is currently used as a laydown area for unprepared steel, which allows for runoff and erosion to both the River and to the storm sewers on Kingsbury Street. In addition, the laydown area allows water from precipitation to collect between the piles of unprepared steel. Recharge of the fill and silty clay units is expected to occur locally and is presumed to be dependent on precipitation. Groundwater encountered at the Site is believed to be perched water with limited groundwater in the native silty clay unit. Based on groundwater elevations and water levels of the River, it is likely that groundwater at the Site flows in the general direction of the River and some groundwater at the Site discharges into the River.

As presented in the SI Report (Burns & McDonnell 2005a), the water-bearing unit at the Site does not meet the regulatory definition of a Class I resource groundwater as defined in 35 IAC, Subtitle F, Part 620 – Groundwater Quality, Section 210 (1997). Depth to shallow groundwater in the native silty clay unit ranged from approximately 3 to 16 feet bgs during SI and SSI activities; however, the additional conditions required for Class I groundwater classification are not met by the silty clay unit. The Site is not located within the minimum setback zone of a potable water supply well. Based on grain size distribution testing performed on the silty clay soil samples, percent fines were 68.1 and 80 percent. The Site has a hydraulic conductivity between 5.37 x 10⁻⁹ and 2.43 x 10⁻⁹ centimeters per second (cm/sec).

Therefore, groundwater at the Site is considered to be Class II resource groundwater in accordance with 35 IAC, Part 620.

In addition, a well survey was conducted for the Site. The following agencies were contacted in May 2005 as part of the well survey: Illinois State Water Survey, Illinois State Geological Survey, Illinois Department of Public Health, City of Chicago Department of Public Health, Cook County Department of Public Health, City of Chicago Department of Water Quality, and the Illinois EPA-Bureau of Water. Upon reviewing the well survey information obtained for the Site, no wells were located within a 1,000-foot radius of the Site. Appendix D contains the results from well survey information obtained from the agencies and a figure that presents the surrounding area well location map.

The City of Chicago currently obtains drinking water from Lake Michigan. Also, Chicago enacted an ordinance in 1997 that prohibits installation of potable wells. Appendix E contains the City of Chicago Groundwater Ordinance (Section 11-8-390).

2.3 SOIL INGESTION EXPOSURE ROUTE

The following subsections evaluate the soil ingestion exposure route for a residential land use and a construction worker. All of 106 soil samples were evaluated.

2.3.1 Residential Property

All soil samples collected, regardless of depth and including samples collected below the saturated zone, were compared to the Tier 1 and non-TACO chemicals (Illinois EPA 2004) residential soil ingestion ROs. Table 2 presents the data screened against the appropriate Tier 1 and non-TACO ROs.

No samples exceeded the Tier 1 residential ROs for TCL VOCs or total cyanide. All TCL SVOC exceedences were PAHs. The benzo(a)anthracene RO of 0.9 mg/kg was exceeded in 36 samples with concentrations ranging from 1 mg/kg in SB49-001 to 17 mg/kg in SB51-001. The benzo(b)fluoranthene RO of 0.9 mg/kg was exceeded in 38 samples with concentrations ranging from 0.92 mg/kg in SP16-001 to 8.5 mg/kg in SB58-001. The benzo(a)pyrene RO of 0.09 mg/kg was exceeded in 59 samples with concentrations ranging from 0.092 mg/kg in SP13-001 to 16 mg/kg in SB51-001. The benzo(k)fluoranthene RO of 9 mg/kg was exceeded in only one sample, SB58-001, with a concentration of 9.8 mg/kg. The dibenzo(a,h)anthracene RO of 0.09 mg/kg was exceeded in 52 samples with concentrations ranging from 0.099 mg/kg in SB01-002 to 1.6 mg/kg in SB58-001. The indeno(1,2,3-cd)pyrene RO of 0.9 mg/kg was exceeded in 26 samples with concentrations ranging from 0.92 mg/kg in SP53-001 to 6.2 mg/kg in SB51-001.

In addition to the Tier 1 residential soil ingestion exceedences for PAHs, the following exceedences for PCBs, arsenic, chromium, and lead were identified. The total PCBs RO of 1 mg/kg was exceeded in 25 samples with concentrations ranging from 1.004 mg/kg in SB15-001 to 15.014 mg/kg in SP35-001. The arsenic RO of 13 mg/kg was exceeded in four samples with concentrations ranging from 15 mg/kg in SB14-002 and SP37-002 to 20 mg/kg in SP35-001. The chromium RO of 230 mg/kg was exceeded in

two samples with concentrations of 320 mg/kg in SP35-001 and 570 mg/kg in SB04-001. The lead RO of 400 mg/kg was exceeded in three samples with concentrations ranging from 450 mg/kg in SP06-001 to 1,400 mg/kg in SP35-001.

2.3.2 Construction Worker

All soil samples, regardless of depth and including samples collected below the saturated zone, collected were compared to the Tier 1 and non-TACO chemicals (Illinois EPA 2004) construction worker soil ingestion ROs. Table 3 presents the data screened against the appropriate Tier 1 and non-TACO ROs.

Total PCBs and lead were the only compounds and analyte, respectively, that exceeded the Tier 1 construction worker soil ingestion ROs. The total PCBs RO of 1 mg/kg was exceeded in 25 samples with concentrations ranging from 1.004 mg/kg in SB15-001 to 15.014 mg/kg in SP35-001. The lead RO of 400 mg/kg was exceeded in three samples with concentrations ranging from 450 mg/kg in SP06-001 to 1,400 mg/kg in SP35-001.

2.4 SOIL INHALATION EXPOSURE ROUTE

The following subsections evaluate the soil inhalation exposure route for a residential land use and a construction worker. All of 106 soil samples were evaluated.

2.4.1 Residential Property

All soil samples collected, regardless of depth and including samples collected below the saturated zone, were compared to the Tier 1 and non-TACO chemicals (Illinois EPA 2004) residential soil inhalation ROs. Table 4 presents the data screened against the appropriate Tier 1 and non-TACO ROs.

Benzene and chromium were the only compound and analyte, respectively, that exceeded Tier 1 residential soil inhalation levels. The benzene level of 0.8 mg/kg was exceeded in eight samples with detected concentrations ranging from 0.92 mg/kg in SP10-003 to 5.7 mg/kg in SB54-001. The chromium level of 270 mg/kg was exceeded in two samples with concentrations of 320 mg/kg in SP35-001 to 570 mg/kg in SB04-001.

2.4.2 Construction Worker

All soil samples collected, regardless of depth and including samples collected below the saturated zone, were compared to the Tier 1 and non-TACO chemicals (Illinois EPA 2004) construction worker soil inhalation ROs. Table 5 presents the data screened against the appropriate Tier 1 and non-TACO ROs.

Benzene and naphthalene were the only compounds that exceeded Tier 1 construction worker soil inhalation ROs. The benzene RO of 2.2 mg/kg was exceeded in six samples with concentrations of 2.6 mg/kg in SP52-001 and 5.7 mg/kg in SB54-001. The naphthalene RO of 1.8 mg/kg was exceeded in 25 samples with concentrations ranging from 2 mg/kg in SB38-001 to 110 mg/kg in SB54-001.

2.5 SOIL MIGRATION TO GROUNDWATER EXPOSURE ROUTE

The soil migration to groundwater exposure route was conservatively evaluated using all 106 soil samples, regardless of depth and including samples collected below the saturated zone. ROs for total concentrations of inorganics and ionizable organics (2-chlorophenol, 2,4-dichlorophenol, pentachlorophenol, 2,4,5-trichlorophenol, and 2,4,6-trichlorophenol) are based on the site-specific pH. Values for soil pH collected from non-impacted soil samples at the Site ranged from 7.52 to 8.82; therefore, the most conservative of the pH-dependent levels listed in Table D, Appendix B of TACO were used with respect to published pH ranges of 7.25 to 7.74, 7.75 to 8.24, 8.25 to 8.74, and 8.75 to 9.0. The pH-specific soil migration to Class I resource groundwater RO was used to evaluate silver and chromium because TACO regulations do not include a Class II resource groundwater RO for these constituents. Table 6 presents the results for samples compared to the Tier 1 and non-TACO chemicals (Illinois EPA 2004) ROs for the soil migration to groundwater exposure route.

Compounds and analytes that exceeded Tier 1 soil migration to Class II resource groundwater ROs included benzene, ethylbenzene, carbazole, benzo(a)anthracene, naphthalene, chromium, lead, and selenium. The benzene RO of 0.17 mg/kg was exceeded in 13 samples with concentrations ranging from 0.19 mg/kg in SB09-001 to 5.7 mg/kg in SB54-001. The ethlybenzene RO of 19 mg/kg was exceeded in two samples with concentrations of 25 mg/kg in SB54-001 and 30 mg/kg in SB50-002. The carbazole RO of 2.8 mg/kg was exceeded in eight samples with concentrations ranging from 2.9 mg/kg in SP03-001 to 6.8 mg/kg in SB58-001. The benzo(a)anthracene RO of 8 mg/kg was exceeded in six samples with concentrations ranging from 8.6 mg/kg in SB48-001 to 17 mg/kg in SB51-001. The naphthalene RO of 18 mg/kg was exceeded in nine samples with concentrations ranging from 22 mg/kg in SB52-001 to 110 mg/kg in SB54-001.

In addition, compounds that exceeded soil ROs for non-TACO chemicals included 2-methylnaphthalene and 4-methylphenol (Illinois EPA 2004). The 2-methylnaphthalene non-TACO RO of 39 mg/kg was exceeded in three samples with concentrations ranging from 45 mg/kg in SB54-001 to 58 mg/kg in SB25-002. The 4-methylphenol non-TACO RO of 0.66 mg/kg was exceeded in eight samples with concentrations (both non-detected and detected) ranging from 1.1 mg/kg in SP06-003 to 2.2 mg/kg in SB58-001.

The chromium RO of 21 mg/kg (which applies to Class I groundwater since there is not a published value for Class II resource groundwater), was exceeded in eight samples with concentrations ranging from 22 mg/kg in SB38-001 to 320 mg/kg in SP35-001. SPLP chromium analysis was conducted on SB04-001, which contained a total chromium concentration of 570 mg/kg. SPLP chromium was below the Tier 1 RO. TCLP chromium analysis was conducted on soil samples SB04-001, SP06-003, and SP43-002, since the samples were either source characterization samples or since the total chromium concentration was elevated, and was detected below the source criteria level of 5.0 milligrams per liter (mg/L) and the Tier 1 soil migration to Class II resource groundwater level of 1.0 mg/L in all three samples. Since both SPLP and TCLP chromium results are below the relevant Tier 1 RO, regardless of the total chromium concentration, chromium should not be of concern for the soil migration to Class II

resource groundwater exposure route. However, select soil confirmation samples may include SPLP chromium analysis to support this conclusion.

SPLP lead analysis was conducted on SP35-001, which contained a total lead concentration of 1,400 mg/kg, to evaluate soil migration to groundwater. SPLP lead was detected at a concentration of 0.02 mg/L, which is below the Tier 1 RO of 0.1 mg/L. Instead of SPLP lead, TCLP lead analysis was conducted on source characterization samples, including SP06-003 and SP43-002 and was detected in both samples at concentrations of 0.2 mg/L in SP06-003 to 0.21 mg/L in SP43-002. These two results are below the source criteria level of 5.0 mg/L, but are above the Tier 1 soil migration to Class II RO. Therefore, lead in soil must be further evaluated (as presented in Section 4.1).

The total selenium RO of 1.3 mg/kg was exceeded in one sample, SP07-001, with a concentration of 2.8 mg/kg. Source characterization samples SP06-003 and SP43-002 were analyzed for TCLP selenium and both results were non-detect, with a detection limit that was below the Tier 1 soil migration to Class II resource groundwater level of 0.05 mg/L and the source criteria level of 1.0 mg/L. Furthermore, selenium was not detected in any of the groundwater samples collected during the SI (discussed below in Section 2.6). Therefore, the soil and groundwater concentrations are such that the migration of these constituents from soil to groundwater should not result in exceedences of the Class II resource groundwater ingestion level for selenium. Although selenium should not be of concern for the soil migration to Class II resource groundwater exposure route, select soil confirmation samples may include SPLP analysis to support this conclusion.

2.6 GROUNDWATER INGESTION EXPOSURE ROUTE

The Tier 1 and non-TACO chemicals (Illinois EPA 2004) ROs for the Class II resource groundwater ingestion exposure route were compared to groundwater sample results. Table 7 presents the Tier 1 evaluation for the groundwater ingestion exposure route.

All three groundwater samples screened were below the Tier 1 ROs for PCBs and total cyanide. The benzene RO of 0.025 mg/L was exceeded in one sample, MW01-001, at a concentration of 0.21 mg/L. The benzo(a)anthracene RO of 0.00065 mg/L was exceeded in one sample, MW05-001, at a concentration of 0.00076 mg/L. Sample MW05-001 also exceeded Tier 1 ROs of 0.65 mg/L, 0.1 mg/L, and 0.02 mg/L for copper, lead, and thallium at concentrations of 1.2 mg/L, 0.96 mg/L and 0.024 mg/L, respectively.

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3.0 EXPOSURE ROUTE EVALUATION

Remediation objectives do not need to be determined for a specific exposure route if it can be demonstrated that the exposure route does not exist according the Subpart C of 35 IAC, Part 742. Before excluding an exposure route, two general criteria must be met: the extent and concentration of the constituents of interest must be characterized and the absence of source material must be demonstrated at the Site. In addition to these general criteria, pathway-specific requirements must be met for each exposure route.

3.1 SOURCE MATERIAL EVALUATION

All soil samples collected during the SI and SSI were included in the TACO source material evaluation. TACO requires the following general criteria be met to demonstrate the absence of source material at a site:

- The sum of the concentrations of all organic contaminants of concern or the TPH concentration shall not exceed the attenuation capacity of the soil, as determined under Section 742.215;
- The concentrations of any contaminants of concern remaining in the soil shall not exceed the soil saturation limit, as determined under Section 742.220;
- The concentrations of any PCBs in the soil shall not exceed 50 mg/kg;
- Any soil which contains contaminants of concern shall not exhibit any of the characteristics of reactivity for hazardous waste or exhibit a pH less than 2.0 or greater than 12.5; and
- Any soil that contains contaminants of concern in the following list of inorganic chemicals and their salts shall not exhibit the characteristics of toxicity for hazardous waste: arsenic, barium, cadmium, chromium, lead, mercury, selenium, or silver, as defined under 35 IAC, Part 721.124.

The soil attenuation capacity is equivalent to the natural organic carbon fraction (f_{oc}) of the soil. The f_{oc} of the soil may be determined on a site-specific basis or TACO default values of 6,000 mg/kg and 2,000 mg/kg may be used for surface (0 to 3 feet bgs) and subsurface (greater than 3 feet bgs) soil, respectively. Since site-specific f_{oc} data was limited, the TACO default values were used to evaluate the soil analytical data. Thirty-eight soil samples were analyzed for TPH and compared to the appropriate default f_{oc} value. Eleven soil samples analyzed for TPH exceeded the soil attenuation capacity with concentrations ranging from 2,589 mg/kg in SB57-001 to 104,100 mg/kg in SB23-003. Table 8 presents the TPH evaluation.

In addition, all organic compound concentrations for each soil sample were summed and compared to the applicable TACO default values for f_{oc} . If a constituent was not detected in a given soil sample, the method detection limit was conservatively used as the constituent concentration for the sample. Four subsurface soil samples (SB18B-002, SB23-003, SB24-002, and SB26-001) exceeded the TACO soil attenuation capacity of 2,000 mg/kg. Tables 9 and 10 present the TACO soil attenuation capacity calculations for surface soil and subsurface soil, respectively.

The soil saturation limit (C_{sat}) for each organic compound that has a melting point below 30 degrees Celsius (°C) was compared to corresponding concentrations in soil samples. The C_{sat} value was not exceeded in any surface or subsurface sample. Tables 9 and 10 present the soil saturation limits evaluation for surface soil and subsurface soil, respectively.

The current total PCB concentrations at the Site are less than the PCB source criteria of 50 mg/kg. A surface soil area containing a total PCB concentration of 55.6 mg/kg (in the vicinity of soil sample SP40-001) was remediated on behalf of the Site owner in April 2004 pursuant to USEPA's self-implementing cleanup and disposal option under Title 40 CFR Part 761.61 as presented in the SI Report (Burns & McDonnell 2005a). Tables 9 and 10 present the total PCB concentration comparison for surface soil and subsurface soil, respectively.

It was determined from visual observation (i.e. using a PID and combustible gas indicator) that the material sampled at the Site was not unstable or explosive, did not generate toxic gases and did not respond violently with water. Table 11 presents reactive cyanide and reactive sulfide.

Table 12 presents the soil pH results in the samples. Sample pH ranged from 7.28 to 10.2; therefore, none of the samples meet the regulatory definition of source material based on pH.

TCLP analysis was performed on selected soil samples for RCRA metals. Results were compared to concentrations that define source material criteria. RCRA metal toxicity characteristic criteria under 35 IAC Part 721, Section 124 were not exceeded in any samples. Table 13 presents the toxicity characteristic evaluation.

Based on the source material evaluation above, the following source material areas were identified:

- The former tar wells;
- The former 100,000-ft³ gas holder;
- The former 420,000-ft³ gas holder;
- The center of the former 17,000,000-ft³ gas holder, north of the former tar wells;
- The vicinity of the possible location of the west valve/weir box;
- The area west of the 17,000,000-ft³ gas holder, along the River; and
- The area located on the southern portion of the Site, along the River.

3.2 SOIL INGESTION EXPOSURE ROUTE

As discussed in Sections 2.3.1 and 2.3.2, Tier 1 ROs for a residential land use and a construction worker were exceeded in surface and subsurface soil samples. Therefore, the soil ingestion exposure route cannot be eliminated and will be further evaluated.

3.3 SOIL INHALATION EXPOSURE ROUTE

As discussed in Section 2.4.1 and 2.4.2, Tier 1 ROs for a residential land use and a construction worker were exceeded in surface and subsurface soil samples. Therefore, the soil inhalation exposure route cannot be eliminated and will be further evaluated.

3.4 GROUNDWATER INGESTION EXPOSURE ROUTE

The groundwater exposure route is divided into two components: 1) soil migration to groundwater or the soil component and 2) groundwater ingestion or the groundwater component.

3.4.1 Soil Component

As discussed in Section 2.5, Class II resource groundwater Tier 1 ROs were exceeded. Therefore, the soil migration to groundwater exposure route cannot be eliminated and will be further evaluated.

3.4.2 Groundwater Component

As discussed in Section 2.6, Class II resource groundwater Tier 1 ROs were exceeded. Therefore, the groundwater ingestion exposure route cannot be eliminated and will be further evaluated.

* * * * *

4.0 FURTHER EVALUATION

Tier 1 exceedences were further evaluated using risk based corrective action (RBCA) equations presented in TACO, Appendix C, Table C and site-specific information to predict groundwater concentrations at the River and Tier 3 evaluations were also conducted, when applicable. The objectives of this further evaluation was to eliminate constituents of concern, if possible. The soil and groundwater components of groundwater ingestion were evaluated further by predicting the groundwater concentration at the River associated with the soil or groundwater concentration at the point of impact. Although a further evaluation of total chromium and total selenium in soil cannot be conducted since the RBCA equations do not address these inorganics, these two compounds are most likely not of concern. However, they will be addressed by selectively including them in soil confirmation sample analyses. A Tier 3 evaluation of the residential population and utility and construction workers was performed to further evaluate the ingestion and inhalation pathways.

4.1 FURTHER EVALUATION OF THE SOIL COMPONENT OF THE GROUNDWATER INGESTION EXPOSURE ROUTE

Benzene, ethylbenzene, carbazole, benzo(a)anthracene, naphthalene, total chromium, TCLP lead and total selenium exceeded Tier 1 ROs for the soil migration to groundwater exposure route. In addition, 2-methylnaphthalene and 4-methylphenol exceeded soil ROs for non-TACO chemicals (Illinois EPA 2004). Therefore, benzene, ethylbenzene, carbazole, benzo(a)anthracene, naphthalene, and TCLP lead were further evaluated using RBCA equations and site-specific information to predict groundwater concentrations, in accordance with 35 IAC, Part 742.810, at the River. The predicted groundwater concentrations were compared to Tier 1 Class II groundwater ingestion levels and surface water quality standards set forth in 35 IAC, Part 302. The River is classified as a secondary contact and indigenous life stream pursuant to 35 IAC Part 303. Illinois water quality standards in 35 IAC, Part 302, Subpart D: Secondary Contact and Indigenous Aquatic Life Standards are applicable to the River. Criteria for organics are not available for the River; therefore, the General Use Water Quality Standards (35 IAC, Section 302 Subpart B) were used for comparison.

Although a further evaluation of 2-methylnaphthalene, 4-methylphenol, total chromium and total selenium in soil cannot be conducted since the RBCA equations do not address these constituents, these constituents are most likely not of concern. Furthermore, 2-methylnaphthalene, 4-methylphenol, total chromium and total selenium are not present in groundwater samples at concentrations that exceed Tier 1 Class II groundwater ingestion ROs. Nonetheless, they will be addressed by selectively including them in soil confirmation sample analyses.

The following site-specific information was used to predict the groundwater concentrations at the River for the Tier 1 RO exceedences for the soil migration to groundwater exposure route:

Site-Specific Information						
Soil Type	Silty Clay					
Hydraulic Gradient (i)	0.0126 cm/cm					
Hydraulic Conductivity (K)	5.37 x 10 ⁻⁹ cm/s*					
Source Width-Vertical (S _d)	2.0 m					
Source Width – Horizontal (S _w)	1.0 m					
Organic Carbon Content (f _{oc})	0.002 g/g					

^{*} Site geophysical testing results show that the hydraulic conductivity is 5.37 x 10⁻⁹ cm/s. The K value from the Site is too low to be used by TACO Plus!TM; therefore, a conservative value of 5.37 x 10⁻⁸ cm/s was used in the calculations.

Benzene exceeded the Tier 1 soil migration to groundwater RO in thirteen samples (SP06-001, SP09-001, SP10-002, SP10-003, SB25-001, SB25-002, SB32-001, SB32-002, SB50-002, SB51-001, SB52-001, SB53-002, and SB54-001). The predicted groundwater concentrations of benzene at the River ranged from 6.53E-260 mg/L to 1.91E-54 mg/L and were all well below the associated surface water quality standard of 0.860 mg/L and the Tier 1 Class II groundwater ingestion RO of 0.025 mg/L.

Ethylbenzene exceeded the Tier 1 soil migration to groundwater RO in two samples (SB50-002 and SB54-001). The predicted groundwater concentrations of ethylbenzene at the River are 3.16E-272 mg/L and 8.49E-101 mg/L and were both well below the associated surface water quality standard of 0.014 mg/L and the Tier 1 Class II groundwater ingestion RO of 1.0 mg/L.

Carbazole exceeded the Tier 1 soil migration to groundwater RO in eight samples (SP03-001, SB09-001, SB19-001, SB24-001, SB25-002, SB51-001, SB53-002, and SB58-001). A Tier 1 Class II groundwater ingestion RO and a surface water quality standard are not available for carbazole. However, the predicted concentrations of carbazole at the River ranged from 4.50E-03 mg/L to 3.47E-01 mg/L and were all well below the groundwater objective concentration used to calculate the Tier 1 soil migration to Class II groundwater RO of 0.02 mg/L.

Benzo(a)anthracene exceeded the Tier 1 soil migration to groundwater RO in six samples (SB25-002, SB47-001, SB48-001, SB51-001, SB53-002, and SB58-001). The predicted groundwater concentrations of benzo(a)anthracene at the River ranged from 3.16E-193 mg/L to 2.59E-43 mg/L and were all well below the Tier 1 Class II groundwater ingestion RO of 0.00065 mg/L. A surface water quality standard is not available for benzo(a)anthracene.

Naphthalene exceeded the Tier 1 soil migration to groundwater RO in nine samples (SP06-002, SP10-003, SB25-002, SB47-001, SB50-002, SB51-001, SB52-001, SB53-002, and SB54-001). The predicted groundwater concentrations of naphthalene at the River ranged from 0.00 mg/L to 5.52E-96 mg/L and were all well below the Tier 1 Class II groundwater ingestion RO of 0.22 mg/L. A surface water quality standard is not available for naphthalene.

TCLP lead exceeded the Tier 1 soil migration to groundwater RO in two samples (SP06-003 and

SP43-002). The predicted groundwater concentrations of lead at the River of 1.74E-03~mg/L and 6.01E-03~mg/L were both well below the Tier 1 Class II groundwater ingestion RO and surface water quality standard of 0.1~mg/L.

The following table summarizes the RBCA evaluation pertaining to soil that exceeded Tier 1 Class II groundwater ingestion levels (soil component) at the point of impact:

Point	Constituent	Conc.	Conc.	Predicted	Class II	SW	Less
			in GW	Conc. At	GW	Criteria	Than
				the River	Criteria		Criteria
		(mg/kg)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	
SP06-002	Benzene	0.78	3.21	1.20E-169	0.025	0.860	YES
SP09-001	Benzene	0.19	0.782	5.37E-113	0.025	0.860	YES
SP10-002	Benzene	3.6	14.82	2.85E-178	0.025	0.860	YES
SP10-003	Benzene	0.92	3.79	7.29E-179	0.025	0.860	YES
SP25-001	Benzene	1.5	6.174	2.46E-253	0.025	0.860	YES
SP25-002	Benzene	0.22	0.906	3.60E-254	0.025	0.860	YES
SP32-001	Benzene	5.2	21.4	4.41E-259	0.025	0.860	YES
SP32-002	Benzene	0.77	3.17	6.53E-260	0.025	0.860	YES
SP50-002	Benzene	2.9	11.9	1.56E-54	0.025	0.860	YES
SP51-001	Benzene	3.7	15.2	1.91E-54	0.025	0.860	YES
SP52-001	Benzene	2.6	10.7	7.22E-149	0.025	0.860	YES
SP53-002	Benzene	0.21	0.864	1.08E-55	0.025	0.860	YES
SP54-001	Benzene	5.7	23.5	1.58E-148	0.025	0.860	YES
SB50-002	Ethylbenzene	30	40.122	8.49E-101	1.0	0.014	YES
SB54-001	Ethylbenzene	25	33.345	3.16E-272	1.0	0.014	YES
SP03-001	Carbazole	2.9	0.421	4.50E-03	NA	NA	YES
SB09-001	Carbazole	3.7	0.54	6.09E-02	NA	NA	YES
SB19-001	Carbazole	3.2	0.464	5.45E-03	NA	NA	YES
SB24-001	Carbazole	4.1	0.5945	6.77E-03	NA	NA	YES
SB25-002	Carbazole	5.7	0.817	7.44E-03	NA	NA	YES
SB51-001	Carbazole	4.8	0.688	3.26E-01	NA	NA	YES
SB53-002	Carbazole	5.1	0.731	3.47E-01	NA	NA	YES
SB58-001	Carbazole	6.8	0.986	3.24E-01	NA	NA	YES
SB25-002	Benzo(a)anthracene	14	0.017	3.16E-193	0.00065	NA	YES
SB47-001	Benzo(a)anthracene	9	0.0108	3.07E-75	0.00065	NA	YES
SB48-001	Benzo(a)anthracene	8.6	0.0103	1.36E-43	0.00065	NA	YES
SB51-001	Benzo(a)anthracene	17	0.0204	2.59E-43	0.00065	NA	YES
SB53-002	Benzo(a)anthracene	14	0.0168	2.14E-43	0.00065	NA	YES

Point	Constituent	Conc.	Conc.	Predicted	Class II	SW	Less
			in GW	Conc. At	GW	Criteria	Than
				the River	Criteria		Criteria
		(mg/kg)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	
SB58-001	Benzo(a)anthracene	14	0.0168	4.01E-53	0.00065	NA	YES
SP06-002	Naphthalene	27	6.58	6.77E-294	0.22	NA	YES
SP10-003	Naphthalene	27	6.58	7.52E-310	0.22	NA	YES
SB25-002	Naphthalene	28	6.83	0.00E+00	0.22	NA	YES
SB47-001	Naphthalene	33	8.04	1.76E-168	0.22	NA	YES
SB50-002	Naphthalene	44	9.04	3.90E-96	0.22	NA	YES
SB51-001	Naphthalene	67	13.80	5.52E-96	0.22	NA	YES
SB52-001	Naphthalene	22	5.36	5.73E-259	0.22	NA	YES
SB53-002	Naphthalene	41	9.99	4.01E-96	0.22	NA	YES
SB54-001	Naphthalene	110	22.6	2.41E-258	0.22	NA	YES
SP06-003	TCLP Lead	NA	0.2*	6.01E-03	0.1	0.1	YES
SB43-002	TCLP Lead	NA	0.21*	1.74E-03	0.1	0.1	YES

Note: (1) NA – Not Available.

Table 14 presents predicted groundwater concentrations compared to surface water quality standards and Tier 1 Class II groundwater ingestion ROs. Figure 7 presents the Tier 1 soil migration to Class II groundwater exceedence map with distances from the evaluated soil sample locations to the edge of the downgradient River. Appendix F presents the supporting information and the RBCA calculations generated by TACO Plus!TM Version 1.0.

In conclusion, further evaluation of Tier 1 soil migration to Class II groundwater exceedences was performed using site-specific information to predict groundwater and surface water concentrations of benzene, ethylbenzene, carbazole, benzo(a)anthracene, naphthalene, and lead at the River. Predicted concentrations are all well below applicable criteria.

4.2 EVALUATION OF THE GROUNDWATER INGESTION EXPOSURE ROUTE

As discussed in Section 2.6, benzene, benzo(a)anthracene, copper, lead, and thallium exceeded the Tier 1 ROs for the groundwater component of the groundwater ingestion exposure route. Therefore, further evaluation utilizing the RBCA equations and site-specific information as presented in Section 4.1, in accordance with 35 IAC, Part 742.810, was performed to predict groundwater and surface water concentrations at the River. The evaluations were generated by TACO Plus!TM Version 1.0.

Benzene exceeded the Tier 1 Class II groundwater ingestion RO at MW01. The predicted groundwater concentration of benzene at the River of 0.025 mg/L is well below the surface water quality standard of 0.860 mg/L and the Tier 1 Class II groundwater ingestion RO of 0.025 mg/L.

Benzo(a)anthracene, copper, lead, and thallium exceeded the relevant Tier 1 Class II groundwater ingetion ROs at MW05. Predicted groundwater concentrations of benzo(a)anthracene, copper, lead, and thallium at the River are all well below the Tier 1 Class II groundwater ingestion levels of 0.00065 mg/L, 0.65 mg/L, 0.1 mg/L, and 0.2 mg/L, respectively and applicable surface water quality standards of 1.0 mg/L for copper and 0.1 mg/L for lead. Surface water quality standards are not available for benzo(a)anthracene and thallium.

Table 15 presents the calculated groundwater concentrations at the River compared to the Tier 1 Class II groundwater ingestion levels. Table 16 presents the calculated groundwater concentrations at the River compared to the surface water quality standards. Figure 8 presents the Tier 1 Class II groundwater ingestion exceedence map with distances from the evaluated groundwater monitoring well locations to the edge of the downgradient River. Appendix G presents the supporting information and the RBCA calculations generated by TACO Plus!TM Version 1.0.

The following table summarizes the RBCA evaluation pertaining to groundwater that exceeded Class II groundwater ingestion levels at the point of impact:

Point	Constituent	Conc.	Conc. in GW	Predicted Conc. At	Class II GW	SW Criteria	Less Than
		(mg/kg)	(mg/L)	the River (mg/L)	Criteria (mg/L)	(mg/L)	Criteria
MW01	Benzene	NA	0.21	2.63E-73	0.025	0.860	YES
MW05	Benzo(a)anthracene	NA	0.00076	6.06E-225	0.00065	NA	YES
MW05	Copper	NA	1.2	6.83E-03	0.65	1.0	YES
MW05	Lead	NA	0.96	5.47E-03	0.1	0.1	YES
MW05	Thallium	NA	0.024	1.37E-04	0.02	NA	YES

Notes: (1) NA – Not Available.

The Site, based on the groundwater modeling results, does not impact the River. The groundwater ordinance adopted by the City of Chicago prohibiting installation of potable groundwater wells serves as an institutional control to ensure that groundwater within the Site is not used as a potable water source. Therefore, with the understanding that the City of Chicago groundwater ordinance prohibits potable well installation in accordance with 35 IAC, Part 742.1015, the groundwater pathway is eliminated. Furthermore, since predicted groundwater impacts above ROs are within the Site, notification to downgradient property owners is not required to use the ordinance to prevent groundwater use. Implementation of the ordinance as a means of preventing ingestion of groundwater at the Site is further discussed in Section 5.

4.3 TIER 3 EVALUATION OF SOIL INGESTION AND INHALATION EXPOSURE ROUTES

A Tier 3 risk based remediation is recommended for unrestricted residential land use and utility and construction worker use at the Site. A Tier 3 evaluation was performed to further evaluate the ingestion and inhalation pathways for soil that will not be removed during remedial action activities. This evaluation was developed from subsurface soil data from SI soil samples collected in February 2002. The evaluation is limited to exposure to soil through the soil ingestion, soil dermal contact, and soil inhalation exposure pathways. The evaluation excludes the portion of the Site in the area of the 30-foot setback from the bank of the River.

The Tier 3 risk-based evaluation was conducted using the formal risk assessment approach found in the USEPA's *Risk Assessment Guidance for Superfund, Volume 1, Human Health Evaluation Manual (Part A)* (USEPA 1989). However, the sample data sets used to conduct this Tier 3 evaluation were limited since they exclude soil samples collected in soil that will be removed during remediation. Once remedial activities are completed, a formal risk assessment will be performed with all remaining SI soil samples and the confirmation samples from remedial activities to accurately evaluate the Site for future residential land use and utility and construction worker populations. Appendix H presents the Tier 3 risk evaluation.

The Tier 3 risk evaluation is being submitted to obtain Illinois EPA approval of scenarios, human exposure factors (both default values and assumptions), and toxicity values used. The Tier 3 evaluation was performed for future resident, utility worker, and construction worker receptors following soil removal during remedial action activities. The conservative assumption was made that if human health risk is acceptable for a resident receptor, it will also be acceptable for a passerby receptor. Therefore, exposure for a passerby was not evaluated. These scenarios and risk assessment variables will be used to conduct a formal risk assessment that incorporates all post-remediation sampling data. ROs for soil ingestion and inhalation will be developed based upon the risk assessment. This risk assessment, ROs, and remedial activities will all be contained in the RACR.

* * * * *

5.0 REMEDIATION OBJECTIVES AND REMEDIAL ACTIONS

This section presents remediation objectives and remedial actions proposed for the Site. Figure 9 presents the proposed soil excavation map.

5.1 REMEDIATION OBJECTIVES

As discussed during the TACO evaluation, certain compounds and analytes in the soil and groundwater exceed applicable Tier 1 soil ingestion ROs, Tier 1 soil inhalation ROs, Tier 1 soil migration to Class II groundwater ROs and Tier 1 Class II groundwater ingestion ROs. However, based on modeling, off-site groundwater and surface water will not be impacted as a result of the Site. Nonetheless, to provide for potential future use of the Site as residential land use, the following remediation goals have been established:

Outside of the 30-foot Setback along the North Branch of the Chicago River

- Eliminate source material at the Site to the extent practical by removal of source material;
- Prevent exposure to residential, utility and construction worker receptors via the ingestion and inhalation exposure routes by removal of the impacted soil to levels established in the Tier 3 risk evaluation included in the SSI/ROR/RAP and develop a post-removal Tier 3 risk assessment to be presented in the RACR; and
- Prevent ingestion of groundwater at the Site by relying on the City of Chicago ordinance prohibiting the installation of potable groundwater wells in the future.

Within the 30-foot Setback along the North Branch of the Chicago River

- Eliminate source material at the Site to the extent practical by removal of source material;
- Prevent exposure to residential and construction worker receptors via the ingestion and inhalation exposure routes by a combination of the following:
 - removal of impacted soil to meet Tier 1 ROs
 - installation of an engineered barrier in the setback zone, as needed to meet Tier 1 ROs; and
- Prevent ingestion of groundwater at the Site by relying on the City of Chicago ordinance prohibiting the installation of potable groundwater wells in the future.

5.2 REMEDIAL ACTIONS

Remedial actions will include the following main components:

- Site preparation;
- Waste characterization;
- Air monitoring during remediation activities;
- Excavation, stockpiling, offsite disposal of impacted soils and backfilling;
- Confirmation soil sampling;
- Management of decontamination water and potential stormwater runon/runoff; and

Demobilization and Site restoration.

5.2.1 Site Preparation

Site preparation activities will be implemented before excavation begins and will consist of the following activities:

- Installation of temporary fencing;
- Installation of carbon filament fabric over fencing to limit odor and dust emissions from the Site;
- Coordination of delivery and set up of Site trailer;
- Installation of temporary electrical utilities and telephone lines to work areas and Site trailer;
- Location of all buried utilities; and
- Installation of air monitoring equipment and pre-activity air sampling, as allowed.

5.2.2 Waste Characterization

Waste characterization samples will be collected for analysis from the Site during remedial activities, as needed. The composite soil sample will be analyzed for TCLP pesticides/herbicides, PCBs, R-Code (TCLP VOCs, TCLP SVOCs, TCLP metals, total cyanide, paint filter, flashpoint, reactive sulfide, percent ash, total solids, total phenols, water reactivity, soil pH and physical appearance), benzene, toluene, ethylbenzene, and total xylenes (BTEX), PAHs, reactive cyanide, LN Panel and F-Code solvent scan. Water generated during excavation will be analyzed for TCLP pesticides/herbicides, TCLP VOCs, TCLP SVOCs, TCLP metals, paint filter, flashpoint, reactive cyanide, reactive sulfide, total phenols PCBs, pH and F-Code solvent scan. All necessary soil and water disposal permits will be prepared and obtained for the Site remediation activities.

5.2.3 Ambient Air Monitoring

An ambient air monitoring program will be implemented during remedial activities and will be designed to ensure that the levels of constituents of concern in the air associated with the remediation activities are below levels that might cause adverse health effects to the surrounding community. The monitoring plan and the associated action levels are designed to ensure that average exposure levels over the course of the remediation are maintained below levels that would cause any acute or chronic health effects. In addition, the monitoring plan and action levels are designed to prevent the occurrence of any peak concentrations that could cause acute reactions.

The program will consist of real-time air monitoring and collection of 24-hour timed-averaged ambient air samples. Real-time air monitoring will provide instantaneous data to ensure safe conditions are maintained for the surrounding community. Monitoring of onsite worker health and safety is addressed in a separate *Site Health and Safety Plan* (Burns & McDonnell 2002). The real-time monitoring data will be used as the basis for field decisions regarding the need to immediately implement dust or vapor control measures should levels exceed pre-determined immediate action levels. Time-averaged air sampling data will be used to validate the measurements made by the real-time monitoring system. In addition, the time-averaged monitoring data will be used to calculate running-average air concentrations for each of the monitored constituents.

Real-time ambient air monitoring will be performed around the perimeter of the Site. The real-time ambient air monitoring will consist of a gas chromatograph (GC) and/or a personal DataRam. In addition, a meteorological monitoring system will collect data continuously. Real-time monitoring will also consist of notation of odors and visible dust emissions identified by field personnel to help minimize the presence of nuisance odors and dust that may be emitted during excavation and removal activities.

To supplement the real-time monitoring and assist in evaluating any long-term health effects, time-averaged ambient air samples will be periodically collected at the perimeter of the Site. The time-averaged air samples will be analyzed for constituents of concern (BTEX, PAHs, and PM₁₀). BTEX monitoring will be performed using fixed ambient air collection devices (Summa[®] canisters). PAHs and PM₁₀ monitoring will be accomplished using high volume sampling equipment. USEPA method TO-15, TO-13A and 40 CFR 50 Appendix J will be used respectively to analyze for BTEX, PAHs, and PM₁₀.

5.2.4 Excavation, Stockpiling, Offsite Disposal and Backfilling

Remedial activities at the Site will consist of the excavation of all surface soil (0 to 3 feet bgs) at the Site, excavation of source material to the extent practicable, excavation of subsurface soil in certain impacted areas, and installation of an engineered barrier, including placement of 3 feet of imported non-impacted backfill material in the 30-foot setback zone located along the River. Figure 9 presents the proposed excavation map.

The total estimated volume of material to be removed and disposed of is approximately 70,000 tons. This non-hazardous special waste material will be segregated, loaded into end-dump trucks, manifested and transported to the Waste Management CID Biopile Subtitle D Landfill or Waste Management CID Area 4 Subtitle C Landfill as special waste. The excavation will be backfilled with soil, sand, stone aggregate, coarse aggregate, or a combination thereof. All backfill material will be placed and compacted, if needed, from approximately 6 inches bgs to the bottom of the excavation. Coarse aggregate will be placed and compacted from the ground surface to approximately 6 inches bgs.

An engineered barrier will be installed in Area A, if needed, at the Site as shown on Figure 9. A 40-mil high density polyethylene (HDPE) liner covered by 3 feet of imported fill will be installed in Area A to serve as an engineered barrier preventing ingestion and inhalation of impacted subsurface soil, if necessary. Also, 3 feet of imported non-impacted fill material will be placed in the remainder of the setback zone to serve as an engineered barrier to prevent ingestion of impacted subsurface soil.

Trucking will occur between the hours of 7 a.m. and 4 p.m. If needed, trucks will be decontaminated with a power wash prior to leaving the Site. If excavation or decontamination water is generated, it will be collected in an onsite temporary storage tank for offsite disposal. A street sweeper will clean residue left by truck tires on nearby streets on a routine basis.

Dust will be controlled by spraying water on the truck routes, excavations and/or the stockpiles, as necessary. If odors are noted at the Site boundaries or emissions of pre-established action levels, the source of the odors or emissions will be identified and sprayed with foam or covered.

Construction activities will be documented. Daily reports, activity logs, manifests and other pertinent data will be generated and maintained.

5.2.5 Confirmation Soil Sampling

Confirmation samples will be collected at the Site to demonstrate that all source material (conservatively defined based on default values presented in TACO) is removed and to establish post-excavation conditions. Composite confirmation samples will be collected along the sidewalls and bottom of excavation areas and will be analyzed for a variety of analytical parameters. In general, confirmation samples will be collected at the bottom of each sampling grid that is excavated to 3 feet bgs. In addition, confirmation samples will be collected at the bottom and along the sidewalls (if possible) in areas that are excavated deeper than 3 feet bgs. Each composite sample will consist of five aliquots that will be homogenized and placed in sampling jars, with the exception of VOC samples, which will be collected as a discrete sample in the center of each sampling area. Figure 10 presents the proposed confirmation sample location map.

5.2.6 Management of Decontamination Water and Potential Stormwater Runon/Runoff

Decontamination water, excavation water, and rainwater that accumulate in the removal area will be managed to prevent it from impacting the Site and surrounding areas. Accumulated water is intended to be pumped to a temporary onsite holding tank for containment and disposed of offsite.

5.2.7 Demobilization and Site Restoration

After completion of excavation backfill and grading activities, the Site will be restored as follows:

- Decontaminate potentially impacted equipment.
- Remove temporary Site trailer.
- Remove filament fabric from Site fencing and temporary fencing.

5.3 SCHEDULE

Excavation activities began in December 2004 and should be completed within twelve to eighteen months.

* * * * *

6.0 REFERENCES

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United States Environmental Protection Agency (USEPA), 1989. *Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A),* Interim Final, EPA/540/1-89/002, December.

United States Geological Survey 7.5-Minute Quadrangle Map for the Chicago Loop, Illinois Quadrangle (1926 topographic map, revised from aerial photographs 1988, field checked 1992, and edited 1993).

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TABLES
THE FORMER WILLOW STREET STATION
MANUFACTURED GAS PLANT SITE,
1640 NORTH KINGSBURY PORTION

Table 1 Soil Analytical Results - Supplemental Site Investigation 2004 The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Sample Location and Depth (feet below ground surface)/Concentration						
	SB46-001	SB46-002	SB47-001	SB47-002	SB48-001	
Compound/Analyte	10 - 12	16 -18	12 - 14	16 -18	8 -10	
	·	TCL Volatiles (mg/k	(g)			
Acetone	0.036 U	0.031 U	0.035 U	0.032 U	0.036 U	
Benzene	0.0073 U	0.0062 U	0.05	0.0065 U	0.0072 U	
Bromodichloromethane	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
Bromoform	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
Bromomethane	0.015 U	0.012 U	0.014 U	0.013 U	0.014 U	
2-Butanone	0.015 U	0.012 U	0.014 U	0.013 U	0.014 U	
Carbon Disulfide	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
Carbon Tetrachloride	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
Chlorobenzene	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
Chloroethane	0.015 U	0.012 U	0.014 U	0.013 U	0.014 U	
Chloroform	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
Chloromethane	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
Dibromochloromethane	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
1,1-Dichloroethane	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
1,2-Dichloroethane	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
1,1-Dichloroethene	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
cis-1,2-Dichloroethene	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
trans-1,2-Dichloroethene	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
1,2-Dichloropropane	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
cis-1,3-Dichloropropene	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
trans-1,3-Dichloropropene	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
Ethylbenzene	0.0073 U	0.0062 U	0.33	0.0065 U	0.0072 U	
2-Hexanone	0.015 U	0.012 U	0.014 U	0.013 U	0.014 U	
4-Methyl-2-Pentanone	0.015 U	0.012 U	0.014 U	0.013 U	0.014 U	
Methylene Chloride	0.015 U	0.012 U	0.014 U	0.013 U	0.014 U	
Methyl tert-butyl ether	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
Styrene	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
1,1,2,2-Tetrachloroethane	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
Tetrachloroethene	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
Γoluene	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
1,1,1-Trichloroethane	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
1,1,2-Trichloroethane	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
Γrichloroethene	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
Vinyl Chloride	0.0073 U	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
Xylenes, Total	0.015 U	0.012 U	0.26	0.013 U	0.014 U	

⁽¹⁾ TCL - Target compound list

⁽²⁾ mg/kg - milligrams per kilogram.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

	5	Sample Location and D	epth (feet below ground	d surface)/Concentration	1		
	SB46-001	SB46-002	SB47-001	SB47-002	SB48-001		
Compound/Analyte	10 - 12	16 -18	12 - 14	16 -18	8 -10		
	TCL Semivolatiles (mg/kg)						
Bis(2-chloroethoxy)methane	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
Bis(2-chloroethyl)ether	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
Bis(2-ethylhexyl)phthalate	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
4-Bromophenyl phenyl ether	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
Butyl benzyl phthalate	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
Carbazole	0.87	0.42 U	1.1	0.41 U	0.57		
4-Chloro-3-methylphenol	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
4-Chloroaniline	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
2-Chloronaphthalene	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
2-Chlorophenol	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
4-Chlorophenyl phenyl ether	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
Dibenzofuran	1.8	0.42 U	2.5	0.41 U	1.5		
1,2-Dichlorobenzene	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
1,3-Dichlorobenzene	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
1,4-Dichlorobenzene	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
3,3´-Dichlorobenzidine	0.86 U	0.83 U	0.88 U	0.82 U	0.89 U		
2,4-Dichlorophenol	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
Diethyl phthalate	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
Dimethyl phthalate	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
Di-n-butyl phthalate	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
2,4-Dimethylphenol	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
4,6-Dinitro-2-methylphenol	2.1 U	2 U	2.1 U	2 U	2.2 U		
2,4-Dinitrophenol	2.1 U	2 U	2.1 U	2 U	2.2 U		
2,4-Dinitrotoluene	0.22 U	0.21 U	0.23 U	0.21 U	0.23 U		
2,6-Dinitrotoluene	0.22 U	0.21 U	0.23 U	0.21 U	0.23 U		
Di-n-octyl phthalate	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
Hexachlorobenzene	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
Hexachlorobutadiene	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
Hexachlorocyclopentadiene	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
Hexachloroethane	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
Isophorone	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
2-Methylnaphthalene	2.8	0.42 U	27	0.41 U	2.5		
2-Methylphenol	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
4-Methylphenol	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
2-Nitroaniline	2.1 U	2 U	2.1 U	2 U	2.2 U		
3-Nitroaniline	2.1 U	2 U	2.1 U	2 U	2.2 U		
4-Nitroaniline	2.1 U	2 U	2.1 U	2 U	2.2 U		
Nitrobenzene	0.22 U	0.21 U	0.23 U	0.21 U	0.23 U		
2-Nitrophenol	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
4-Nitrophenol	2.1 U	2 U	2.1 U	2 U	2.2 U		
N-Nitrosodi-n-propylamine	0.22 U	0.21 U	0.23 U	0.21 U	0.23 U		
N-Nitrosodiphenylamine	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
2, 2'-Oxybis(1-Chloropropane)	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
Pentachlorophenol	2.1 U	2 U	2.1 U	2 U	2.2 U		
Phenol	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
1,2,4-Trichlorobenzene	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		
2,4,5-Trichlorophenol	0.86 U	0.83 U	0.88 U	0.82 U	0.89 U		
2,4,6-Trichlorophenol NOTES:	0.43 U	0.42 U	0.44 U	0.41 U	0.44 U		

⁽¹⁾ TCL - Target compound list

⁽²⁾ mg/kg - milligrams per kilogram.
(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

	Sample Location and Depth (feet below ground surface)/Concentration						
	SB46-001	SB46-002	SB47-001	SB47-002	SB48-001		
Compound/Analyte	10 - 12	16 -18	12 - 14	16 -18	8 -10		
		PAHs (mg/kg)					
Acenaphthene	4.9	0.17	22	0.074	5.9		
Acenaphthylene	0.73	0.033	2.7	0.031 U	0.99		
Anthracene	6.4	0.19	11	0.031 U	9.5		
Benzo(a)anthracene	5.8	0.17	9	0.032	8.6		
Benzo(b)fluoranthene	4.5	0.075	4.5	0.031 U	5.5		
Benzo(k)fluoranthene	4.1	0.12	5.1	0.031 U	6.2		
Benzo(g,h,i)perylene	2.7	0.046	3.9	0.031 U	5.5		
Benzo(a)pyrene	5.9	0.086	4.6	0.031 U	9.8		
Chrysene	5.4	0.2	8	0.048	8.1		
Dibenzo(a,h)anthracene	0.83	0.031 U	0.91	0.031 U	1.2		
Fluoranthene	13	0.42	20	0.072	20		
Fluorene	3.8	0.13	13	0.04	3.5		
Indeno(1,2,3-cd)pyrene	2.4	0.035	2.5	0.031 U	4.2		
Naphthalene	6.5	0.4	33	0.13	5.3		
Phenanthrene	17	0.6	43	0.12	21		
Pyrene	14	0.52	26	0.088	22		
	·	TPH (mg/kg)					
TPH (Gasoline)	26 U	24 U	27 U	25 U	25 U		
TPH (Diesel)	140	24 U	100	25 U	83		
TPH (Oil)	410	24 U	97	25 U	270		

- (1) PAHs Polynuclear Aromatic Hydrocarbons (2) mg/kg milligrams per kilogram.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) TPH Total Petroleum Hydrocarbons

	Sample Location and Depth (feet below ground surface)/Concentration						
	SB48-002	SB49-001	SB49B-001	SB50-001	SB50-002		
Compound/Analyte	18 - 20	8 - 10	14 - 16	10 - 12	14 - 16		
	·	TCL Volatiles (mg/k	g)				
Acetone	0.03 U	0.029 U	0.031 U	0.082	1.9 U		
Benzene	0.0059 U	0.0059 U	0.0063 U	0.13	2.9		
Bromodichloromethane	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
Bromoform	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
Bromomethane	0.012 U	0.012 U	0.013 U	0.026 U	0.75 U		
2-Butanone	0.012 U	0.012 U	0.013 U	0.026 U	0.75 U		
Carbon Disulfide	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
Carbon Tetrachloride	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
Chlorobenzene	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
Chloroethane	0.012 U	0.012 U	0.013 U	0.026 U	0.75 U		
Chloroform	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
Chloromethane	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
Dibromochloromethane	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
1,1-Dichloroethane	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
1,2-Dichloroethane	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
1,1-Dichloroethene	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
cis-1,2-Dichloroethene	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
trans-1,2-Dichloroethene	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
1,2-Dichloropropane	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
cis-1,3-Dichloropropene	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
trans-1,3-Dichloropropene	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
Ethylbenzene	0.0059 U	0.0059 U	0.0063 U	0.6	30		
2-Hexanone	0.012 U	0.012 U	0.013 U	0.026 U	0.75 U		
4-Methyl-2-Pentanone	0.012 U	0.012 U	0.013 U	0.026 U	0.75 U		
Methylene Chloride	0.012 U	0.012 U	0.013 U	0.026 U	0.75 U		
Methyl tert-butyl ether	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
Styrene	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
1,1,2,2-Tetrachloroethane	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
Tetrachloroethene	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
Toluene	0.0059 U	0.0059 U	0.0063 U	0.016	0.38 U		
1,1,1-Trichloroethane	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
1,1,2-Trichloroethane	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
Trichloroethene	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
Vinyl Chloride	0.0059 U	0.0059 U	0.0063 U	0.013 U	0.38 U		
Xylenes, Total	0.012 U	0.012 U	0.013 U	2.3	21		

⁽¹⁾ TCL - Target compound list

⁽²⁾ mg/kg - milligrams per kilogram.
(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

	Sample Location and Depth (feet below ground surface)/Concentration						
	SB48-002	SB49-001	SB49B-001	SB50-001	SB50-002		
Compound/Analyte	18 - 20	8 - 10	14 - 16	10 - 12	14 - 16		
	,	TCL Semivolatiles (mg	/kg)				
Bis(2-chloroethoxy)methane	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
Bis(2-chloroethyl)ether	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
Bis(2-ethylhexyl)phthalate	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
4-Bromophenyl phenyl ether	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
Butyl benzyl phthalate	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
Carbazole	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
4-Chloro-3-methylphenol	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
4-Chloroaniline	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
2-Chloronaphthalene	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
2-Chlorophenol	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
4-Chlorophenyl phenyl ether	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
Dibenzofuran	0.41 U	0.42 U	0.41 U	0.47 U	1.2		
1,2-Dichlorobenzene	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
1,3-Dichlorobenzene	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
1,4-Dichlorobenzene	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
3,3´-Dichlorobenzidine	0.82 U	0.84 U	0.82 U	0.93 U	0.91 U		
2,4-Dichlorophenol	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
Diethyl phthalate	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
Dimethyl phthalate	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
Di-n-butyl phthalate	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
2,4-Dimethylphenol	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
4,6-Dinitro-2-methylphenol	2 U	2 U	2 U	2.3 U	2.2 U		
2,4-Dinitrophenol	2 U	2 U	2 U	2.3 U	2.2 U		
2,4-Dinitrotoluene	0.21 U	0.22 U	0.21 U	0.24 U	0.23 U		
2,6-Dinitrotoluene	0.21 U	0.22 U	0.21 U	0.24 U	0.23 U		
Di-n-octyl phthalate	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
Hexachlorobenzene	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
Hexachlorobutadiene	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
Hexachlorocyclopentadiene	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
Hexachloroethane	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
Isophorone	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
2-Methylnaphthalene	1.1	0.42 U	0.41 U	0.95	7.5		
2-Methylphenol	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
4-Methylphenol	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
2-Nitroaniline	2 U	2 U	2 U	2.3 U	2.2 U		
3-Nitroaniline	2 U	2 U	2 U	2.3 U	2.2 U		
4-Nitroaniline	2 U	2 U	2 U	2.3 U	2.2 U		
Nitrobenzene	0.21 U	0.22 U	0.21 U	0.24 U	0.23 U		
2-Nitrophenol	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
4-Nitrophenol	2 U	2 U	2 U	2.3 U	2.2 U		
N-Nitrosodi-n-propylamine	0.21 U	0.22 U	0.21 U	0.24 U	0.23 U		
N-Nitrosodiphenylamine	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
2, 2'-Oxybis(1-Chloropropane)	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
Pentachlorophenol	2 U	2 U	2 U	2.3 U	2.2 U		
Phenol	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
1,2,4-Trichlorobenzene	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		
2,4,5-Trichlorophenol	0.82 U	0.84 U	0.82 U	0.93 U	0.91 U		
2,4,6-Trichlorophenol	0.41 U	0.42 U	0.41 U	0.47 U	0.46 U		

⁽¹⁾ TCL - Target compound list

⁽²⁾ mg/kg - milligrams per kilogram.
(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

	Sample Location and Depth (feet below ground surface)/Concentration									
	SB48-002	SB49-001	SB49B-001	SB50-001	SB50-002					
Compound/Analyte	18 - 20	8 - 10	14 - 16	10 - 12	14 - 16					
PAHs (mg/kg)										
Acenaphthene	0.41	0.32	0.031 U	1.1	3					
Acenaphthylene	0.031 U	0.19	0.031 U	0.57	0.44					
Anthracene	0.16	0.44	0.031 U	1.4	2.6					
Benzo(a)anthracene	0.11	1	0.035	2.2	3.9					
Benzo(b)fluoranthene	0.063	0.78	0.031 U	1.5	2.4					
Benzo(k)fluoranthene	0.082	0.74	0.032	1.5	3.8					
Benzo(g,h,i)perylene	0.034	0.68	0.031 U	0.83	0.74					
Benzo(a)pyrene	0.088	1	0.041	2.3	4.4					
Chrysene	0.14	1	0.053	2.1	3.1					
Dibenzo(a,h)anthracene	0.031 U	0.11	0.031 U	0.22	0.24					
Fluoranthene	0.22	1.9	0.058	2.9	7.2					
Fluorene	0.26	0.24	0.031 U	0.6	2.2					
Indeno(1,2,3-cd)pyrene	0.031 U	0.55	0.031 U	0.75	0.89					
Naphthalene	7.8	0.2	0.041	0.32	44					
Phenanthrene	0.52	1.3	0.079	2.3	8.7					
Pyrene	0.21	2.1	0.078	4.2	6.4					
	·	TPH (mg/kg)								
TPH (Gasoline)	24 U	25 U	22 U	140	110					
TPH (Diesel)	24 U	25 U	22 U	1,200	150					
TPH (Oil)	24 U	25 U	22 U	1,500	33					

- (1) PAHs Polynuclear Aromatic Hydrocarbons(2) mg/kg milligrams per kilogram.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) TPH Total Petroleum Hydrocarbons

	Sample Location and Depth (feet below ground surface)/Concentration						
	SB50-003	SB51-001	SB51-002	SB52-001	SB52-002		
Compound/Analyte	20 - 22	10 -12	18 - 20	6 - 8	12 - 14		
		TCL Volatiles (mg/k	(g)				
Acetone	0.037 UJ	0.03 U	0.027 U	1.4 U	0.027 UJ		
Benzene	0.0073 UJ	3.7	0.0055 U	2.6	0.0089 J		
Bromodichloromethane	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
Bromoform	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
Bromomethane	0.015 UJ	0.012 U	0.011 U	0.55 U	0.011 UJ		
2-Butanone	0.015 UJ	0.012 U	0.011 U	0.55 U	0.011 UJ		
Carbon Disulfide	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
Carbon Tetrachloride	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
Chlorobenzene	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
Chloroethane	0.015 UJ	0.012 U	0.011 U	0.55 U	0.011 UJ		
Chloroform	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
Chloromethane	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
Dibromochloromethane	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
1,1-Dichloroethane	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
1,2-Dichloroethane	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
1,1-Dichloroethene	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
cis-1,2-Dichloroethene	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
trans-1,2-Dichloroethene	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
1,2-Dichloropropane	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
cis-1,3-Dichloropropene	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
trans-1,3-Dichloropropene	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
Ethylbenzene	0.56	5.8	0.0055 U	11	0.043 J		
2-Hexanone	0.015 UJ	0.012 U	0.011 U	0.55 U	0.011 UJ		
4-Methyl-2-Pentanone	0.015 UJ	0.012 U	0.011 U	0.55 U	0.011 UJ		
Methylene Chloride	0.015 UJ	0.012 U	0.011 U	0.55 U	0.011 UJ		
Methyl tert-butyl ether	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
Styrene	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
1,1,2,2-Tetrachloroethane	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
Tetrachloroethene	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
Toluene	0.018 J	0.0094	0.0055 U	0.7	0.0097 J		
1,1,1-Trichloroethane	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
1,1,2-Trichloroethane	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
Trichloroethene	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
Vinyl Chloride	0.0073 UJ	0.006 U	0.0055 U	0.28 U	0.0054 UJ		
Xylenes, Total	2.1 J	3.9	0.024	9.8	0.055 J		

⁽¹⁾ TCL - Target compound list

⁽²⁾ mg/kg - milligrams per kilogram.
(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽⁴⁾ J - Indicates an estimated value.

	Sample Location and Depth (feet below ground surface)/Concentration							
	SB50-003	SB51-001	SB51-002	SB52-001	SB52-002			
Compound/Analyte	20 - 22	10 -12	18 - 20	6 - 8	12 - 14			
	,	TCL Semivolatiles (mg	g/kg)					
Bis(2-chloroethoxy)methane	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
Bis(2-chloroethyl)ether	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
Bis(2-ethylhexyl)phthalate	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
-Bromophenyl phenyl ether	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
Butyl benzyl phthalate	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
Carbazole	0.45 U	4.8	0.41 U	0.4 U	0.39 U			
-Chloro-3-methylphenol	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
-Chloroaniline	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
2-Chloronaphthalene	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
-Chlorophenol	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
-Chlorophenyl phenyl ether	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
Dibenzofuran	0.45 U	3.4	0.82	0.91	0.39 U			
,2-Dichlorobenzene	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
,3-Dichlorobenzene	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
,4-Dichlorobenzene	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
3,3´-Dichlorobenzidine	0.89 U	0.87 U	0.82 U	0.8 U	0.77 U			
2,4-Dichlorophenol	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
Diethyl phthalate	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
Dimethyl phthalate	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
Di-n-butyl phthalate	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
2,4-Dimethylphenol	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
,6-Dinitro-2-methylphenol	2.2 U	2.1 U	2 U	1.9 U	1.9 U			
2,4-Dinitrophenol	2.2 U	2.1 U	2 U	1.9 U	1.9 U			
2,4-Dinitrotoluene	0.23 U	0.22 U	0.21 U	0.21 U	0.2 U			
2,6-Dinitrotoluene	0.23 U	0.22 U	0.21 U	0.21 U	0.2 U			
Di-n-octyl phthalate	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
Hexachlorobenzene	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
Hexachlorobutadiene	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
Hexachlorocyclopentadiene	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
Hexachloroethane	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
sophorone	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
2-Methylnaphthalene	0.45 U	52	4.5	19	1.8			
-Methylphenol	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
-Methylphenol	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
-Nitroaniline	2.2 U	2.1 U	2 U	1.9 U	1.9 U			
-Nitroaniline	2.2 U	2.1 U	2 U	1.9 U	1.9 U			
-Nitroaniline	2.2 U	2.1 U	2 U	1.9 U	1.9 U			
Vitrobenzene	0.23 U	0.22 U	0.21 U	0.21 U	0.2 U			
-Nitrophenol	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
-Nitrophenol	2.2 U	2.1 U	2 U	1.9 U	1.9 U			
I-Nitrosodi-n-propylamine	0.23 U	0.22 U	0.21 U	0.21 U	0.2 U			
I-Nitrosodiphenylamine	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
, 2'-Oxybis(1-Chloropropane)	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
entachlorophenol	2.2 U	2.1 U	2 U	1.9 U	1.9 U			
henol	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
,2,4-Trichlorobenzene	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			
,4,5-Trichlorophenol	0.89 U	0.87 U	0.82 U	0.8 U	0.77 U			
2,4,6-Trichlorophenol	0.45 U	0.44 U	0.41 U	0.4 U	0.39 U			

⁽¹⁾ TCL - Target compound list
(2) mg/kg - milligrams per kilogram.
(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

	Sa	Sample Location and Depth (feet below ground surface)/Concentration						
	SB50-003	SB51-001	SB51-002	SB52-001	SB52-002			
Compound/Analyte	20 - 22	10 -12	18 - 20	6 - 8	12 - 14			
		PAHs (mg/kg)						
Acenaphthene	0.086	28	2.4	3.7	0.19			
Acenaphthylene	0.034 U	4.1	0.47	1	0.066			
Anthracene	0.18	20	2.2	2.2	0.12			
Benzo(a)anthracene	0.42	17	2.3	1.8	0.091			
Benzo(b)fluoranthene	0.27	8.2	1.2	0.71	0.038			
Benzo(k)fluoranthene	0.38	7.4	1.1	0.31	0.035			
Benzo(g,h,i)perylene	0.077	8	0.57	0.18	0.029 U			
Benzo(a)pyrene	0.46	16	1.7	1.3	0.07			
Chrysene	0.42	17	2	1.7	0.096			
Dibenzo(a,h)anthracene	0.037	1.4	0.11	0.1	0.029 U			
Fluoranthene	0.66	36	3.7	2.7	0.15			
Fluorene	0.098	21	2.5	3.6	0.2			
Indeno(1,2,3-cd)pyrene	0.098	6.2	0.59	0.35	0.029 U			
Naphthalene	0.52	67	6.1	22	2.3			
Phenanthrene	0.46	78	7.6	11	0.65			
Pyrene	0.55	50	4.2	4.5	0.22			
	·	TPH (mg/kg)						
TPH (Gasoline)	26 U	26	25 U	24	23 U			
TPH (Diesel)	31	290	25 U	420	23 U			
TPH (Oil)	26 U	290	30	330	23 U			

- (1) PAHs Polynuclear Aromatic Hydrocarbons
- (2) mg/kg milligrams per kilogram.
- $(3) \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) TPH Total Petroleum Hydrocarbons

	Sample Location and Depth (feet below ground surface)/Concentration						
	SB53-001	SB53-002	SB53-003	SB54-001	SB54-002		
Compound/Analyte	8 - 10	14 - 16	18 - 20	8 - 10	14 - 16		
		TCL Volatiles (mg/l	(g)				
Acetone	0.036 U	0.1	0.031 UJ	3.2 U	0.027 U		
Benzene	0.0086	0.21	0.0062 UJ	5.7	0.0054 U		
Bromodichloromethane	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
Bromoform	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
Bromomethane	0.015 U	0.019 U	0.012 UJ	1.3 U	0.011 U		
2-Butanone	0.015 U	0.023	0.012 UJ	1.3 U	0.011 U		
Carbon Disulfide	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
Carbon Tetrachloride	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
Chlorobenzene	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
Chloroethane	0.015 U	0.019 U	0.012 UJ	1.3 U	0.011 U		
Chloroform	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
Chloromethane	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
Dibromochloromethane	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
1,1-Dichloroethane	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
1,2-Dichloroethane	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
1,1-Dichloroethene	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
cis-1,2-Dichloroethene	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
trans-1,2-Dichloroethene	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
1,2-Dichloropropane	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
cis-1,3-Dichloropropene	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
trans-1,3-Dichloropropene	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
Ethylbenzene	0.0073 U	1.2	0.0062 UJ	25	0.0054 U		
2-Hexanone	0.015 U	0.019 U	0.012 UJ	1.3 U	0.011 U		
4-Methyl-2-Pentanone	0.015 U	0.019 U	0.012 UJ	1.3 U	0.011 U		
Methylene Chloride	0.018	0.035	0.026 J	1.3 U	0.011 U		
Methyl tert-butyl ether	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
Styrene	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
1,1,2,2-Tetrachloroethane	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
Tetrachloroethene	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
Toluene	0.0073 U	0.013	0.0062 UJ	0.84	0.0054 U		
1,1,1-Trichloroethane	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
1,1,2-Trichloroethane	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
Trichloroethene	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
Vinyl Chloride	0.0073 U	0.0095 U	0.0062 UJ	0.64 U	0.0054 U		
Xylenes, Total	0.015 U	1.7	0.012 UJ	8.7	0.011 U		

NOTES:

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⁽¹⁾ TCL - Target compound list

⁽²⁾ mg/kg - milligrams per kilogram.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽⁴⁾ J - Indicates an estimated value.

		Sample Location and D		1 surface)/Concentratio	
	SB53-001	SB53-002	SB53-003	SB54-001	SB54-002
Compound/Analyte	8 - 10	14 - 16	18 - 20	8 - 10	14 - 16
		TCL Semivolatiles (mg	g/kg)		
Bis(2-chloroethoxy)methane	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
Bis(2-chloroethyl)ether	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
Bis(2-ethylhexyl)phthalate	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
4-Bromophenyl phenyl ether	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
Butyl benzyl phthalate	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
Carbazole	0.41 U	5.1	0.4 U	0.51	0.4 U
4-Chloro-3-methylphenol	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
4-Chloroaniline	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
2-Chloronaphthalene	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
2-Chlorophenol	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
4-Chlorophenyl phenyl ether	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
Dibenzofuran	0.41 U	4.9	0.4 U	1.9	0.4 U
1,2-Dichlorobenzene	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
1,3-Dichlorobenzene	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
1,4-Dichlorobenzene	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
3,3´-Dichlorobenzidine	0.82 U	0.85 U	0.8 U	0.84 U	0.79 U
2,4-Dichlorophenol	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
Diethyl phthalate	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
Dimethyl phthalate	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
Di-n-butyl phthalate	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
2,4-Dimethylphenol	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
4,6-Dinitro-2-methylphenol	2 U	2.1 U	1.9 U	2 U	1.9 U
2,4-Dinitrophenol	2 U	2.1 U	1.9 U	2 U	1.9 U
2,4-Dinitrotoluene	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U
2,6-Dinitrotoluene	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U
Di-n-octyl phthalate	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
Hexachlorobenzene	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
Hexachlorobutadiene	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
Hexachlorocyclopentadiene	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
Hexachloroethane	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
Isophorone	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
2-Methylnaphthalene	0.41 U	37	0.4 U	45	0.4 U
2-Methylphenol	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
4-Methylphenol	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
2-Nitroaniline	2 U	2.1 U	1.9 U	2 U	1.9 U
3-Nitroaniline	2 U	2.1 U	1.9 U	2 U	1.9 U
4-Nitroaniline	2 U	2.1 U	1.9 U	2 U	1.9 U
Nitrobenzene	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U
2-Nitrophenol	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
4-Nitrophenol	2 U	2.1 U	1.9 U	2 U	1.9 U
N-Nitrosodi-n-propylamine	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U
N-Nitrosodiphenylamine	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
2, 2'-Oxybis(1-Chloropropane)	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
Pentachlorophenol	2 U	2.1 U	1.9 U	2 U	1.9 U
Phenol	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
1,2,4-Trichlorobenzene	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U
2,4,5-Trichlorophenol	0.82 U	0.85 U	0.8 U	0.84 U	0.79 U
2,4,6-Trichlorophenol	0.41 U	0.43 U	0.4 U	0.42 U	0.4 U

⁽¹⁾ TCL - Target compound list

⁽²⁾ mg/kg - milligrams per kilogram.
(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

	Sample Location and Depth (feet below ground surface)/Concentration						
	SB53-001	SB53-002	SB53-003	SB54-001	SB54-002		
Compound/Analyte	8 - 10	14 - 16	18 - 20	8 - 10	14 - 16		
		PAHs (mg/kg)					
Acenaphthene	2	16	0.11	12	0.046		
Acenaphthylene	1.6	2.4	0.046	4	0.03 U		
Anthracene	2.6	16	0.12	7.4	0.046		
Benzo(a)anthracene	5.2	14	0.12	5.4	0.037		
Benzo(b)fluoranthene	1.4	6.4	0.054	2.6	0.03 U		
Benzo(k)fluoranthene	1.8	6.5	0.076	2.1	0.03 U		
Benzo(g,h,i)perylene	1	1.6	0.042	1.8	0.03 U		
Benzo(a)pyrene	4.8	11	0.099	4.8	0.034		
Chrysene	6.8	15	0.14	5.3	0.045		
Dibenzo(a,h)anthracene	0.5	1.2	0.03 U	0.6	0.03 U		
Fluoranthene	7.8	24	0.22	9.6	0.062		
Fluorene	4	19	0.13	9.3	0.049		
Indeno(1,2,3-cd)pyrene	0.92	1.8	0.031	1.6	0.03 U		
Naphthalene	1.5	41	0.24	110	0.26		
Phenanthrene	14	57	0.48	27	0.15		
Pyrene	12	27	0.27	14	0.095		
		TPH (mg/kg)					
TPH (Gasoline)	23 U	25 U	22 U	37	22 U		
TPH (Diesel)	400	1,000	22 U	250	22 U		
TPH (Oil)	670	890	22 U	140	22 U		

⁽¹⁾ PAHs - Polynuclear Aromatic Hydrocarbons (2) mg/kg - milligrams per kilogram.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽⁴⁾ TPH - Total Petroleum Hydrocarbons

	S	Sample Location and D	epth (feet below groun	d surface)/Concentratio	n
	SB55-001	SB55-002	SB56-001	SB57-001	SB57-002
Compound/Analyte	6 - 8	12 - 14	18 - 20	10 - 12	16 - 18
		TCL Volatiles (mg/k	(g)		
Acetone	0.026	0.032 U	0.028 U	0.047 U	0.028 U
Benzene	0.064	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Bromodichloromethane	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Bromoform	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Bromomethane	0.01 U	0.013 U	0.011 U	0.019 U	0.011 U
2-Butanone	0.01 U	0.013 U	0.011 U	0.019 U	0.011 U
Carbon Disulfide	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Carbon Tetrachloride	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Chlorobenzene	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Chloroethane	0.01 U	0.013 U	0.011 U	0.019 U	0.011 U
Chloroform	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Chloromethane	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Dibromochloromethane	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
1,1-Dichloroethane	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
1,2-Dichloroethane	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
1,1-Dichloroethene	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
cis-1,2-Dichloroethene	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
trans-1,2-Dichloroethene	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
1,2-Dichloropropane	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
cis-1,3-Dichloropropene	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
trans-1,3-Dichloropropene	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Ethylbenzene	0.11	0.0064 U	0.0056 U	0.0093 U	0.0057 U
2-Hexanone	0.01 U	0.013 U	0.011 U	0.019 U	0.011 U
4-Methyl-2-Pentanone	0.01 U	0.013 U	0.011 U	0.019 U	0.011 U
Methylene Chloride	0.01 U	0.013 U	0.011 U	0.019 U	0.011 U
Methyl tert-butyl ether	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Styrene	0.016	0.0064 U	0.0056 U	0.0093 U	0.0057 U
1,1,2,2-Tetrachloroethane	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Tetrachloroethene	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Toluene	0.066	0.0064 U	0.0056 U	0.0093 U	0.0057 U
1,1,1-Trichloroethane	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
1,1,2-Trichloroethane	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Trichloroethene	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Vinyl Chloride	0.005 U	0.0064 U	0.0056 U	0.0093 U	0.0057 U
Xylenes, Total	0.18	0.013 U	0.011 U	0.019 U	0.011 U

⁽¹⁾ TCL - Target compound list

⁽²⁾ mg/kg - milligrams per kilogram.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

	Sample Location and Depth (feet below ground surface)/Concentration							
	SB55-001	SB55-002	SB56-001	SB57-001	SB57-002			
Compound/Analyte	6 - 8	12 - 14	18 - 20	10 - 12	16 - 18			
	,	TCL Semivolatiles (mg						
Bis(2-chloroethoxy)methane	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
Bis(2-chloroethyl)ether	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
Bis(2-ethylhexyl)phthalate	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
-Bromophenyl phenyl ether	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
Butyl benzyl phthalate	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
Carbazole	0.39 U	0.4 U	0.4 U	4.9	0.39 U			
-Chloro-3-methylphenol	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
-Chloroaniline	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
-Chloronaphthalene	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
-Chlorophenol	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
-Chlorophenyl phenyl ether	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
Dibenzofuran	0.39 U	0.4 U	0.4 U	3.4	0.39 U			
,2-Dichlorobenzene	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
,3-Dichlorobenzene	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
,4-Dichlorobenzene	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
,3´-Dichlorobenzidine	0.79 U	0.81 U	0.81 U	0.97 U	0.79 U			
,4-Dichlorophenol	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
Diethyl phthalate	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
Dimethyl phthalate	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
Di-n-butyl phthalate	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
,4-Dimethylphenol	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
,6-Dinitro-2-methylphenol	1.9 U	2 U	2 U	2.4 U	1.9 U			
,4-Dinitrophenol	1.9 U	2 U	2 U	2.4 U	1.9 U			
,4-Dinitrotoluene	0.2 U	0.21 U	0.21 U	0.25 U	0.2 U			
,6-Dinitrotoluene	0.2 U	0.21 U	0.21 U	0.25 U	0.2 U			
Di-n-octyl phthalate	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
Hexachlorobenzene	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
Iexachlorobutadiene	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
Hexachlorocyclopentadiene	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
Iexachloroethane	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
sophorone	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
-Methylnaphthalene	0.8	0.4 U	0.4 U	3	0.39 U			
-Methylphenol	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
-Methylphenol	0.39 U	0.4 U	0.4 U	2.7	0.39 U			
-Nitroaniline	1.9 U	2 U	2 U	2.4 U	1.9 U			
-Nitroaniline	1.9 U	2 U	2 U	2.4 U	1.9 U			
-Nitroaniline	1.9 U	2 U	2 U	2.4 U	1.9 U			
itrobenzene	0.2 U	0.21 U	0.21 U	0.25 U	0.2 U			
-Nitrophenol	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
-Nitrophenol	1.9 U	2 U	2 U	2.4 U	1.9 U			
-Nitrosodi-n-propylamine	0.2 U	0.21 U	0.21 U	0.25 U	0.2 U			
-Nitrosodiphenylamine	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
, 2'-Oxybis(1-Chloropropane)	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
entachlorophenol	1.9 U	2 U	2 U	2.4 U	1.9 U			
henol	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
,2,4-Trichlorobenzene	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			
,4,5-Trichlorophenol	0.79 U	0.81 U	0.81 U	0.97 U	0.79 U			
,4,6-Trichlorophenol	0.39 U	0.4 U	0.4 U	0.48 U	0.39 U			

⁽¹⁾ TCL - Target compound list

⁽²⁾ mg/kg - milligrams per kilogram.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

	Sa	ample Location and Do	epth (feet below ground	d surface)/Concentration	n
	SB55-001	SB55-002	SB56-001	SB57-001	SB57-002
Compound/Analyte	6 - 8	12 - 14	18 - 20	10 - 12	16 - 18
	·	PAHs (mg/kg)			
Acenaphthene	0.078	0.03 U	0.031 U	3.9	0.03 U
Acenaphthylene	0.089	0.03 U	0.031 U	0.85	0.03 U
Anthracene	0.099	0.03 U	0.031 U	11	0.03 U
Benzo(a)anthracene	0.098	0.03 U	0.031 U	18	0.03 U
Benzo(b)fluoranthene	0.054	0.03 U	0.031 U	11	0.03 U
Benzo(k)fluoranthene	0.05	0.03 U	0.031 U	12	0.03 U
Benzo(g,h,i)perylene	0.033	0.03 U	0.031 U	6.7	0.03 U
Benzo(a)pyrene	0.092	0.03 U	0.031 U	15	0.03 U
Chrysene	0.1	0.03 U	0.031 U	16	0.037
Dibenzo(a,h)anthracene	0.029 U	0.03 U	0.031 U	1.8	0.03 U
Fluoranthene	0.16	0.03 U	0.031 U	31	0.056
Fluorene	0.15	0.03 U	0.031 U	6.4	0.03 U
Indeno(1,2,3-cd)pyrene	0.029 U	0.03 U	0.031 U	6.9	0.03 U
Naphthalene	0.95	0.03 U	0.031 U	4.1	0.054
Phenanthrene	0.58	0.067	0.037	26	0.11
Pyrene	0.31	0.03 U	0.031 U	29	0.057
		TPH (mg/kg)	_	_	
TPH (Gasoline)	23 U	22 U	23 U	29 U	24 U
TPH (Diesel)	23 U	22 U	23 U	660	24 U
TPH (Oil)	27	22 U	23 U	1,900	24 U

⁽¹⁾ PAHs - Polynuclear Aromatic Hydrocarbons

⁽²⁾ mg/kg - milligrams per kilogram.

 $^{(3)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

⁽⁴⁾ TPH - Total Petroleum Hydrocarbons

	S	ample Location and D	epth (feet below ground	d surface)/Concentratio	n
	SB58-001	SB58-002	SB58-003	SB59-001	SB59-002
Compound/Analyte	12 - 14	16 - 18	8 - 10	6 - 8	16 - 18
		TCL Volatiles (mg/k	(g)		
Acetone	0.047 U	0.031 UJ	0.047 J	0.028 U	0.033 U
Benzene	0.0094 U	0.0061 UJ	0.0093 UJ	0.031	0.0067 U
Bromodichloromethane	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
Bromoform	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
Bromomethane	0.019 U	0.012 UJ	0.019 UJ	0.011 U	0.013 U
2-Butanone	0.019 U	0.012 UJ	0.019 UJ	0.011 U	0.013 U
Carbon Disulfide	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
Carbon Tetrachloride	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
Chlorobenzene	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
Chloroethane	0.019 U	0.012 UJ	0.019 UJ	0.011 U	0.013 U
Chloroform	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
Chloromethane	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
Dibromochloromethane	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
1,1-Dichloroethane	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
1,2-Dichloroethane	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
1,1-Dichloroethene	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
cis-1,2-Dichloroethene	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
trans-1,2-Dichloroethene	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
1,2-Dichloropropane	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
cis-1,3-Dichloropropene	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
trans-1,3-Dichloropropene	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
Ethylbenzene	0.0094 U	0.0061 UJ	0.0093 UJ	0.071	0.0067 U
2-Hexanone	0.019 U	0.012 UJ	0.019 UJ	0.011 U	0.013 U
4-Methyl-2-Pentanone	0.019 U	0.012 UJ	0.019 UJ	0.011 U	0.013 U
Methylene Chloride	0.019 U	0.012 UJ	0.019 UJ	0.017	0.016
Methyl tert-butyl ether	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
Styrene	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
1,1,2,2-Tetrachloroethane	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
Tetrachloroethene	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
Toluene	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
1,1,1-Trichloroethane	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
1,1,2-Trichloroethane	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
Trichloroethene	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
Vinyl Chloride	0.0094 U	0.0061 UJ	0.0093 UJ	0.0055 U	0.0067 U
Xylenes, Total	0.019 U	0.012 UJ	0.019 UJ	0.044	0.013 U

⁽¹⁾ TCL - Target compound list

⁽²⁾ mg/kg - milligrams per kilogram.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽⁴⁾ J - Indicates an estimated value.

	S	Sample Location and Depth (feet below ground surface)/Concentration						
	SB58-001	SB58-002	SB58-003	SB59-001	SB59-002			
Compound/Analyte	12 - 14	16 - 18	8 - 10	6 - 8	16 - 18			
		TCL Semivolatiles (mg	g/kg)					
Bis(2-chloroethoxy)methane	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
Bis(2-chloroethyl)ether	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
Bis(2-ethylhexyl)phthalate	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
4-Bromophenyl phenyl ether	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
Butyl benzyl phthalate	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
Carbazole	6.8	0.41 U	0.51 U	0.39 U	0.38 U			
4-Chloro-3-methylphenol	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
4-Chloroaniline	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
2-Chloronaphthalene	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
2-Chlorophenol	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
4-Chlorophenyl phenyl ether	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
Dibenzofuran	4.6	0.41 U	0.51 U	0.39 U	0.38 U			
1,2-Dichlorobenzene	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
1,3-Dichlorobenzene	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
1,4-Dichlorobenzene	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
3,3´-Dichlorobenzidine	1.1 U	0.82 U	1 U	0.78 U	0.75 U			
2,4-Dichlorophenol	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
Diethyl phthalate	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
Dimethyl phthalate	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
Di-n-butyl phthalate	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
2,4-Dimethylphenol	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
4,6-Dinitro-2-methylphenol	2.6 U	2 U	2.5 U	1.9 U	1.8 U			
2,4-Dinitrophenol	2.6 U	2 U	2.5 U	1.9 U	1.8 U			
2,4-Dinitrotoluene	0.28 U	0.21 U	0.26 U	0.2 U	0.19 U			
2,6-Dinitrotoluene	0.28 U	0.21 U	0.26 U	0.2 U	0.19 U			
Di-n-octyl phthalate	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
Hexachlorobenzene	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
Hexachlorobutadiene	0.54 U	0.41 U	0.51 U 0.51 U	0.39 U	0.38 U			
Hexachlorocyclopentadiene	0.54 U	0.41 U		0.39 U	0.38 U			
Hexachloroethane	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
Isophorone Mathylpophthologo	0.54 U 3.8	0.41 U 0.41 U	0.51 U 1.3	0.39 U 0.39 U	0.38 U 0.38 U			
2-Methylnaphthalene 2-Methylphenol	0.54 U	0.41 U 0.41 U	0.51 U	0.39 U	0.38 U			
4-Methylphenol	2.2	0.41 U	0.51 U	0.39 U	0.38 U			
4-Metnyiphenoi 2-Nitroaniline	2.6 U	2 U	2.5 U	1.9 U	1.8 U			
3-Nitroaniline	2.6 U	2 U	2.5 U	1.9 U	1.8 U			
4-Nitroaniline	2.6 U	2 U	2.5 U	1.9 U	1.8 U			
Nitrobenzene	0.28 U	0.21 U	0.26 U	0.2 U	0.19 U			
2-Nitrophenol	0.28 U	0.21 U	0.20 U	0.2 U	0.19 U			
4-Nitrophenol	2.6 U	2 U	2.5 U	1.9 U	1.8 U			
N-Nitrosodi-n-propylamine	0.28 U	0.21 U	0.26 U	0.2 U	0.19 U			
N-Nitrosodiphenylamine	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
2, 2'-Oxybis(1-Chloropropane)	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
Pentachlorophenol	2.6 U	2 U	2.5 U	1.9 U	1.8 U			
Phenol	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
1,2,4-Trichlorobenzene	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
2,4,5-Trichlorophenol	1.1 U	0.82 U	1 U	0.78 U	0.75 U			
2,4,6-Trichlorophenol	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U			
NOTES:	1							

⁽¹⁾ TCL - Target compound list

⁽²⁾ mg/kg - milligrams per kilogram.
(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

	S	ample Location and De	epth (feet below groun	d surface)/Concentratio	n
	SB58-001	SB58-002	SB58-003	SB59-001	SB59-002
Compound/Analyte	12 - 14	16 - 18	8 - 10	6 - 8	16 - 18
	·	PAHs (mg/kg)			
Acenaphthene	4.3	0.072	1.3	0.029 U	0.028 U
Acenaphthylene	0.45	0.031 U	0.63	0.029 U	0.028 U
Anthracene	11	0.079	1.1	0.029 U	0.028 U
Benzo(a)anthracene	14	0.065	2.2	0.029 U	0.028 U
Benzo(b)fluoranthene	8.5	0.038	2.3	0.029 U	0.028 U
Benzo(k)fluoranthene	9.8	0.038	1.7	0.029 U	0.028 U
Benzo(g,h,i)perylene	3.2	0.031 U	1.2	0.029 U	0.028 U
Benzo(a)pyrene	12	0.059	2.4	0.029 U	0.028 U
Chrysene	12	0.061	2	0.029	0.028 U
Dibenzo(a,h)anthracene	1.6	0.031 U	0.45	0.029 U	0.028 U
Fluoranthene	27	0.14	4.2	0.029	0.028 U
Fluorene	6.2	0.088	1.4	0.029 U	0.028 U
Indeno(1,2,3-cd)pyrene	3.8	0.031 U	1.2	0.029 U	0.028 U
Naphthalene	4	0.39	0.87	0.087	0.028 U
Phenanthrene	27	0.24	1.3	0.089	0.075
Pyrene	23	0.11	4.7	0.05	0.028 U
	·	TPH (mg/kg)			
TPH (Gasoline)	31 U	23 U	43	23 U	22 U
TPH (Diesel)	300	23 U	5,100	23 U	22 U
TPH (Oil)	1,100	25	500	25	22 U

- (1) PAHs Polynuclear Aromatic Hydrocarbons
- (2) mg/kg milligrams per kilogram.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) TPH Total Petroleum Hydrocarbons

Table 2 Tier 1 Screening: Soil Ingestion Exposure Route Residential Property The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept		ind surface)/Conce	
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3
		TCL Volat	iles (mg/kg)			
Acetone	7,800	0.099	0.041 U	0.17	0.091	0.051
Benzene	12	0.0097 U	0.0082 U	0.055	0.015	0.0072 U
Bromodichloromethane	10	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Bromoform	81	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Bromomethane	110	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
2-Butanone		0.019 U	0.016 U	0.024 U	0.02	0.014 U
Carbon Disulfide	7,800	0.0097 U	0.0082 U	0.023	0.0081 U	0.0072 U
Carbon Tetrachloride	5	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chlorobenzene	1,600	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chloroethane +	31,000	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
Chloroform	100	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chloromethane +	310	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Dibromochloromethane	1600	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1-Dichloroethane	7,800	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,2-Dichloroethane	7	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1-Dichloroethene	700	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
cis-1,2-Dichloroethene	780	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
trans-1,2-Dichloroethene	1,600	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,2-Dichloropropane	9	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
cis-1,3-Dichloropropene	6.4	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
trans-1,3-Dichloropropene	6.4	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Ethylbenzene	7,800	0.0097 U	0.0082 U	0.044	0.049	0.0072 U
2-Hexanone +	3,100	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
4-Methyl-2-Pentanone		0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
Methylene Chloride	85	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA
Styrene	16,000	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1,2,2-Tetrachloroethane +	4,700	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Tetrachloroethene	12	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Toluene	16,000	0.0097 U	0.0082 U	0.036	0.0081 U	0.0072 U
1,1,1-Trichloroethane		0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1,2-Trichloroethane	310	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Trichloroethene	58	0.0097 U	0.0082 U	0.021	0.0081 U	0.0072 U
Vinyl Chloride	0.46	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
m,p-Xylene*	160,000	0.0097 U	0.0082 U	0.028	0.0081 U	0.0072 U
o-Xylene*	160,000	0.0097 U	0.0082 U	0.025	0.012	0.0096
Xylenes, Total	160,000	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram. (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route Residential Property The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1			th (feet below grou		
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3
		TCL Semivol	atiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Bis(2-chloroethyl)ether **	0.6	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Bis(2-ethylhexyl)phthalate	46	0.37 U	0.45	0.37 U	0.38 U	0.49
4-Bromophenyl phenyl ether		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Butyl benzyl phthalate	16,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Carbazole	32	0.37 U	0.38 U	0.52	0.47	2.9
4-Chloro-3-methylphenol +	5,500	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
4-Chloroaniline	310	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2-Chloronaphthalene		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2-Chlorophenol	390	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
4-Chlorophenyl phenyl ether		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Dibenzofuran +	310	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
1,2-Dichlorobenzene	7,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
1,3-Dichlorobenzene +	70	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
1,4-Dichlorobenzene		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
3,3´-Dichlorobenzidine **	1	0.74 U	0.76 U	0.75 U	0.75 U	0.71 U
2,4-Dichlorophenol	230	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Diethyl phthalate	63,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Dimethyl phthalate +	780,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Di-n-butyl phthalate	7,800	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2,4-Dimethylphenol	1,600	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
4,6-Dinitro-2-methylphenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
2,4-Dinitrophenol	160	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
2,4-Dinitrotoluene **	0.9	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2,6-Dinitrotoluene **	0.9	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Di-n-octyl phthalate	1,600	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Hexachlorobenzene **	0.4	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Hexachlorobutadiene +	16	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Hexachlorocyclopentadiene	550	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Hexachloroethane	78	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Isophorone	15,600	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2-Methylnaphthalene +	310	0.37 U	0.38 U	0.85	0.38 U	0.57
2-Methylphenol	3,900	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
4-Methylphenol +	390	0.37 U	0.38 U	0.56	0.38 U	0.36 U
2-Nitroaniline		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
3-Nitroaniline		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
4-Nitroaniline		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
Nitrobenzene	39	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2-Nitrophenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
4-Nitrophenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
N-Nitrosodi-n-propylamine **	0.09	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
N-Nitrosodiphenylamine	130	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.016 U	0.016 U	0.015 U
Pentachlorophenol **	3	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
Phenol	47,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
1,2,4-Trichlorobenzene	780	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2,4,5-Trichlorophenol	7,800	0.74 U	0.76 U	0.75 U	0.75 U	0.71 U
2,4,6-Trichlorophenol	58	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) ** Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou		
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3
		PAHs (mg/kg)			
Acenaphthene	4,700	0.037	0.029 U	0.45	0.19	0.69
Acenaphthylene +	2,300	0.032	0.029 U	1.2	0.13	0.32
Anthracene	23,000	0.27	0.16	1.5	0.3	0.75
Benzo(a)anthracene	0.9	0.34	0.34	3.5	0.43	2.5
Benzo(b)fluoranthene	0.9	0.44	0.32	2.2	0.36	1.8
Benzo(k)fluoranthene	9	0.44	0.26	2.7	0.39	1.6
Benzo(g,h,i)perylene +	2,300	0.31	0.23	2	0.48	0.94
Benzo(a)pyrene	0.09	0.32	0.21	3.1	0.52	2.3
Chrysene	88	0.71	0.67	4.1	0.62	2.5
Dibenzo(a,h)anthracene	0.09	0.16	0.099	0.81	0.13	0.39
Fluoranthene	3,100	1.4	1.1	6.2	0.85	4.1
Fluorene	3,100	0.067	0.029 U	0.63	0.21	0.65
Indeno(1,2,3-cd)pyrene	0.9	0.31	0.2	2	0.35	0.93
Naphthalene	1,600	0.36	0.044	0.84	0.28	0.75
Phenanthrene +	2,300	0.64	0.35	3.8	1	3.7
Pyrene	2,300	1.5	1.2	8.6	1.1	4.5
		PCBs (
Aroclor 1016		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1221		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1232		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1242		0.09 U	0.093 U	0.094	0.09 U	0.4
Aroclor 1248		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1254		0.18 U	0.19 U	0.18 U	0.18 U	0.33
Aroclor 1260		0.18 U	0.19 U	0.18 U	0.18 U	0.16 U
Total PCBs	1	0.810 U	0.845 U	0.814	0.810 U	1.226
		Pollutant Metals a		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	,	
Antimony	31	0.97 UJ	1 UJ	1 UJ	1 UJ	1.1 UJ
Arsenic	13.0	8.1	9.2 J	6.5	2.5 J	7.2
Barium	5,500	61 J	47 J	82 J	19 J	68 J
Beryllium	160	0.75	0.87	1.1	0.63	1
Cadmium	78	0.91	0.54	0.79	0.52 U	1.1
Chromium	230	14 J	20 J	15 J	6.9 J	20 J
Copper	2,900	66 J	32 J	43 J	8.9 J	110 J
Lead	400	380 J	41	130 J	31	150 J
Mercury	23	0.35	0.28	0.15	0.035	0.076
Nickel	1,600	17 J	33 J	20 J	5.5 J	23 J
Selenium	390	0.97 U	1 U	1 U	1 U	1.1 U
Silver	390	0.97 U	1 U	1 U	1 U	1.1 U
Thallium	6.3	0.97 U	4.2	1	1 U	1.1 U
Zinc	23,000	160 J	70 J	90 J	23 J	290 J
Total Cyanide NOTES:	1,600	0.31 U	0.27 U	0.26 U	0.26 U	0.23 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	A		_ `	nd surface)/Conce	
	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001
Compound/Analyte	Level (mg/kg)	4-5	5-7	2-3	9-10	2-3
		TCL Volat	iles (mg/kg)			
Acetone	7,800	0.32	0.061 U	0.067	0.061	0.073
Benzene	12	0.017 U	0.012 U	0.015	0.012 U	0.079
Bromodichloromethane	10	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Bromoform	81	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Bromomethane	110	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
2-Butanone		0.072	0.025 U	0.024 U	0.023 U	0.025 U
Carbon Disulfide	7,800	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Carbon Tetrachloride	5	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chlorobenzene	1,600	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chloroethane +	31,000	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Chloroform	100	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chloromethane +	310	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Dibromochloromethane	1600	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1-Dichloroethane	7,800	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,2-Dichloroethane	7	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1-Dichloroethene	700	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
cis-1,2-Dichloroethene	780	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
trans-1,2-Dichloroethene	1,600	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,2-Dichloropropane	9	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
cis-1,3-Dichloropropene	6.4	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
trans-1,3-Dichloropropene	6.4	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Ethylbenzene	7,800	0.017 U	0.012 U	0.012 U	0.012 U	0.15
2-Hexanone +	3,100	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
4-Methyl-2-Pentanone		0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Methylene Chloride	85	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA
Styrene	16,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1,2,2-Tetrachloroethane +	4,700	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Tetrachloroethene	12	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Toluene	16,000	0.017 U	0.012 U	0.012 U	0.012 U	0.041
1,1,1-Trichloroethane		0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1,2-Trichloroethane	310	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Trichloroethene	58	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Vinyl Chloride	0.46	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
m,p-Xylene*	160,000	0.017 U	0.012 U	0.012 U	0.012 U	0.11
o-Xylene*	160,000	0.017 U	0.012 U	0.012 U	0.012 U	0.12
Xylenes, Total	160,000	NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Tier 1						
G.,	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001	
Compound/Analyte	Level (mg/kg)	4-5	5-7	2-3	9-10	2-3	
	п		atiles (mg/kg)	0.20.11	0.20.11	0.20.11	
Bis(2-chloroethoxy)methane		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
Bis(2-chloroethyl)ether **	0.6	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
Bis(2-ethylhexyl)phthalate	46	0.44 U	1.1	0.38 U	0.39 U	0.38 U	
4-Bromophenyl phenyl ether		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
Butyl benzyl phthalate	16,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
Carbazole	32	0.44 U	0.41 U	0.67	0.39 U	2.2	
4-Chloro-3-methylphenol +	5,500	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
4-Chloroaniline	310	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
2-Chloronaphthalene		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
2-Chlorophenol	390	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
4-Chlorophenyl phenyl ether		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
Dibenzofuran +	310	0.44 U	0.41 U	0.38 U	0.39 U	0.4	
1,2-Dichlorobenzene	7,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
1,3-Dichlorobenzene +	70	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
1,4-Dichlorobenzene		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
3,3´-Dichlorobenzidine **	1	0.89 U	0.82 U	0.76 U	0.78 U	0.76 U	
2,4-Dichlorophenol	230	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
Diethyl phthalate	63,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
Dimethyl phthalate +	780,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
Di-n-butyl phthalate	7,800	0.44 U	0.45	0.38 U	0.39 U	0.38 U	
2,4-Dimethylphenol	1,600	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
4,6-Dinitro-2-methylphenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U	
2,4-Dinitrophenol	160	2.1 U	2 U	1.8 U	1.9 U	1.8 U	
2,4-Dinitrotoluene **	0.9	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
2,6-Dinitrotoluene **	0.9	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
Di-n-octyl phthalate	1,600	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
Hexachlorobenzene **	0.4	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
Hexachlorobutadiene +	16	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
Hexachlorocyclopentadiene	550	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
Hexachloroethane	78	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
Isophorone	15,600	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
2-Methylnaphthalene +	310	0.44 U	0.41 U	0.54	0.39 U	2.7	
2-Methylphenol	3,900	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
4-Methylphenol +	390	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
2-Nitroaniline		2.1 U	2 U	1.8 U	1.9 U	1.8 U	
3-Nitroaniline		2.1 U	2 U	1.8 U	1.9 U	1.8 U	
4-Nitroaniline		2.1 U	2 U	1.8 U	1.9 U	1.8 U	
Nitrobenzene	39	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
2-Nitrophenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U	
4-Nitrophenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U	
N-Nitrosodi-n-propylamine **	0.09	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
N-Nitrosodiphenylamine	130	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
2, 2'-Oxybis(1-Chloropropane)		0.019 U	0.017 U	0.016 U	0.017 U	0.016 U	
Pentachlorophenol **	3	2.1 U	2 U	1.8 U	1.9 U	1.8 U	
Phenol	47,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
1,2,4-Trichlorobenzene	780	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	
2,4,5-Trichlorophenol	7,800	0.89 U	0.82 U	0.76 U	0.78 U	0.76 U	
2,4,6-Trichlorophenol	58	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U	

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) ** Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued)

Tier 1 Screening: Soil Ingestion Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample I	Location and Dept	h (feet below grou	below ground surface)/Concentration		
	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001	
Compound/Analyte	Level (mg/kg)	4-5	5-7	2-3	9-10	2-3	
		PAHs (mg/kg)					
Acenaphthene	4,700	0.034 U	0.17	0.84	0.03 U	1.4	
Acenaphthylene +	2,300	0.034 U	0.13	1.3	0.03 U	0.59	
Anthracene	23,000	0.034 U	0.7	1.1	0.03 U	1.7	
Benzo(a)anthracene	0.9	0.034 U	0.78	3	0.03 U	3.3	
Benzo(b)fluoranthene	0.9	0.034 U	1.1	1.9	0.03 U	2	
Benzo(k)fluoranthene	9	0.034 U	0.91	2.5	0.03 U	2.4	
Benzo(g,h,i)perylene +	2,300	0.034 U	1.2	1.2	0.03 U	1.4	
Benzo(a)pyrene	0.09	0.034 U	0.75	3.3	0.03 U	3.3	
Chrysene	88	0.034 U	1.7	3.5	0.03 U	4.2	
Dibenzo(a,h)anthracene	0.09	0.034 U	0.41	0.55	0.03 U	0.71	
Fluoranthene	3,100	0.034 U	2.4	4.3	0.03 U	7.2	
Fluorene	3,100	0.034 U	0.31	0.77	0.03 U	1.5	
Indeno(1,2,3-cd)pyrene	0.9	0.034 U	0.74	1.3	0.03 U	1.6	
Naphthalene	1,600	0.034 U	0.15	0.22	0.03 U	4.2	
Phenanthrene +	2,300	0.034 U	1.5	2.9	0.03 U	7	
Pyrene	2,300	0.034 U	3.4	6.6	0.03 U	6.1	
		PCBs (mg/kg)	•	•		
Aroclor 1016		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U	
Aroclor 1221		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U	
Aroclor 1232		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U	
Aroclor 1242		0.1 U	5.8	0.092 U	0.095 U	0.29	
Aroclor 1248		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U	
Aroclor 1254		0.2 U	3.4	0.19 U	0.19 U	0.29	
Aroclor 1260		0.2 U	0.19 U	0.19 U	0.19 U	0.18 U	
Total PCBs	1	0.900 U	9.774	0.840 U	0.855 U	1.128	
	Priority	Pollutant Metals a	nd Total Cyanide	(mg/kg)			
Antimony	31	1.2 UJ	1.4 J	1.1 UJ	1.1 UJ	1.1 UJ	
Arsenic	13.0	3.6 J	8.1 J	9	5.8 J	7.3	
Barium	5,500	58 J	260 J	78 J	18 J	160 J	
Beryllium	160	1.3	0.72	1.1	0.97	0.95	
Cadmium	78	0.6 U	3	1.1	0.55 U	1.2	
Chromium	230	20 J	570 J	14 J	15 J	13 J	
Copper	2,900	18 J	220 J	140 J	19 J	35 J	
Lead	400	17	280	160 J	13	450 J	
Mercury	23	0.031 U	0.31	0.32	0.027 U	0.22	
Nickel	1,600	24 J	76 J	20 J	23 J	17 J	
Selenium	390	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	
Silver	390	1.2 U	1.3	1.1 U	1.1 U	1.1 U	
Thallium	6.3	1.2	1.2 U	1.1 U	1.5	1.1 U	
Zinc	23,000	63 J	780 J	240 J	37 J	320 J	
Total Cyanide	1,600	0.31 U	0.33 U	0.27 U	0.31 U	0.25 U	

- (1) mg/kg milligrams per kilogram.(2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	A		th (feet below grou		
	Screening	SP06-002	SP06-003	SP07-001	SP07-002	SP07-003
Compound/Analyte	Level (mg/kg)	3-4	8-10	1-2	9-10	16-17
		TCL Volat	iles (mg/kg)			
Acetone	7,800	0.16	0.092 U	0.06 U	0.068 U	0.046 U
Benzene	12	0.78	0.056	0.012 U	0.014 U	0.0093 U
Bromodichloromethane	10	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Bromoform	81	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Bromomethane	110	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
2-Butanone		0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Carbon Disulfide	7,800	0.025 U	0.018 U	0.04	0.014 U	0.0093 U
Carbon Tetrachloride	5	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Chlorobenzene	1,600	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Chloroethane +	31,000	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Chloroform	100	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Chloromethane +	310	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Dibromochloromethane	1600	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1-Dichloroethane	7,800	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,2-Dichloroethane	7	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1-Dichloroethene	700	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
cis-1,2-Dichloroethene	780	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
trans-1,2-Dichloroethene	1,600	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,2-Dichloropropane	9	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
cis-1,3-Dichloropropene	6.4	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
trans-1,3-Dichloropropene	6.4	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Ethylbenzene	7,800	3	0.38	0.013	0.014 U	0.0093 U
2-Hexanone +	3,100	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
4-Methyl-2-Pentanone		0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Methylene Chloride	85	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA
Styrene	16,000	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1,2,2-Tetrachloroethane +	4,700	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Tetrachloroethene	12	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Toluene	16,000	0.79	0.044	0.012	0.014 U	0.0093 U
1,1,1-Trichloroethane		0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1,2-Trichloroethane	310	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Trichloroethene	58	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Vinyl Chloride	0.46	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
m,p-Xylene*	160,000	3	0.098	0.016	0.014 U	0.0093 U
o-Xylene*	160,000	2	0.17	0.012 U	0.014 U	0.0093 U
Xylenes, Total	160,000	NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration								
	Tier 1							
	Screening	SP06-002	SP06-003	SP07-001	SP07-002	SP07-003		
Compound/Analyte	Level (mg/kg)	3-4	8-10	1-2	9-10	16-17		
		TCL Semivol	, , ,					
Bis(2-chloroethoxy)methane		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Bis(2-chloroethyl)ether **	0.6	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Bis(2-ethylhexyl)phthalate	46	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
4-Bromophenyl phenyl ether		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Butyl benzyl phthalate	16,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Carbazole	32	0.39 U	1.4	0.47	0.38 U	0.39 U		
4-Chloro-3-methylphenol +	5,500	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
4-Chloroaniline	310	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2-Chloronaphthalene		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2-Chlorophenol	390	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
4-Chlorophenyl phenyl ether		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Dibenzofuran +	310	1.3	1.6	0.37 U	0.38 U	0.39 U		
1,2-Dichlorobenzene	7,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
1,3-Dichlorobenzene +	70	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
1,4-Dichlorobenzene		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
3,3´-Dichlorobenzidine **	1	0.78 U	2.2 U	0.74 U	0.76 U	0.79 U		
2,4-Dichlorophenol	230	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Diethyl phthalate	63,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Dimethyl phthalate +	780,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Di-n-butyl phthalate	7,800	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2,4-Dimethylphenol	1,600	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
4,6-Dinitro-2-methylphenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U		
2,4-Dinitrophenol	160	1.9 U	5.2 U	1.8 U	1.9 U	1.9 U		
2,4-Dinitrotoluene **	0.9	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2,6-Dinitrotoluene **	0.9	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Di-n-octyl phthalate	1,600	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Hexachlorobenzene **	0.4	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Hexachlorobutadiene +	16	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Hexachlorocyclopentadiene	550	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Hexachloroethane	78	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Isophorone	15,600	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2-Methylnaphthalene +	310	20	17	0.4	0.38 U	0.39 U		
2-Methylphenol	3,900	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
4-Methylphenol +	390	0.39 U	1.1 U	0.37 U	0.38 U 1.9 U	0.39 U		
2-Nitroaniline		1.9 U	5.2 U	1.8 U		1.9 U		
3-Nitroaniline 4-Nitroaniline		1.9 U 1.9 U	5.2 U 5.2 U	1.8 U 1.8 U	1.9 U 1.9 U	1.9 U 1.9 U		
4-Nitroaniline Nitrobenzene	39	0.39 U	5.2 U 1.1 U	0.37 U	0.38 U	0.39 U		
	39	0.39 U 1.9 U	5.2 U	1.8 U	0.38 U 1.9 U	0.39 U 1.9 U		
2-Nitrophenol 4-Nitrophenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U		
4-Nitropnenoi N-Nitrosodi-n-propylamine **	0.09	0.39 U	5.2 U 1.1 U	0.37 U	0.38 U	0.39 U		
N-Nitrosodi-n-propylamine N-Nitrosodiphenylamine	130	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2, 2'-Oxybis(1-Chloropropane)	130	0.39 U 0.017 U	0.046 U	0.37 U 0.016 U	0.38 U 0.016 U	0.39 U 0.017 U		
2, 2 -Oxybis(1-Chioropropane) Pentachlorophenol **	3	0.017 U	5.2 U	0.016 U	0.016 U 1.9 U	0.017 U 1.9 U		
Phenol	47,000	0.39 U	5.2 U 1.1 U	0.37 U	0.38 U	0.39 U		
1,2,4-Trichlorobenzene	780	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2,4,5-Trichlorophenol	7,800	0.39 U 0.78 U	2.2 U	0.37 U 0.74 U	0.38 U 0.76 U	0.39 U 0.79 U		
2,4,6-Trichlorophenol	58	0.78 U	2.2 U 1.1 U	0.74 U	0.76 U	0.79 U		
NOTES:	<u> 10 38 </u>	U.39 U	1.1 U	U.37 U	0.38 U	0.39 U		

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) **} Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.

^{(6) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued)

Tier 1 Screening: Soil Ingestion Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample I	Location and Dept	h (feet below grou	nd surface)/Concer	ntration
	Screening	SP06-002	SP06-003	SP07-001	SP07-002	SP07-003
Compound/Analyte	Level (mg/kg)	3-4	8-10	1-2	9-10	16-17
		PAHs (mg/kg)			
Acenaphthene	4,700	10	4.5	0.28 U	0.029 U	0.03 U
Acenaphthylene +	2,300	2	4.2	0.39	0.029 U	0.03 U
Anthracene	23,000	9.6	4.9	0.54	0.029 U	0.03 U
Benzo(a)anthracene	0.9	3.9	4.2	1.5	0.029 U	0.03 U
Benzo(b)fluoranthene	0.9	1.1	1.3	1.3	0.029 U	0.03 U
Benzo(k)fluoranthene	9	0.89	1.1	0.98	0.029 U	0.03 U
Benzo(g,h,i)perylene +	2,300	1.2	0.82 U	0.77	0.029 U	0.03 U
Benzo(a)pyrene	0.09	2.7	0.97	1.6	0.029 U	0.03 U
Chrysene	88	5.1	4.3	1.6	0.029 U	0.03 U
Dibenzo(a,h)anthracene	0.09	0.52	0.82 U	0.28 U	0.029 U	0.03 U
Fluoranthene	3,100	9.1	6.8	2.5	0.029 U	0.03 U
Fluorene	3,100	10	6.5	0.28 U	0.029 U	0.03 U
Indeno(1,2,3-cd)pyrene	0.9	1.2	0.82 U	0.71	0.029 U	0.03 U
Naphthalene	1,600	27	13	0.28	0.029 U	0.03 U
Phenanthrene +	2,300	34	21	2.1	0.029 U	0.03 U
Pyrene	2,300	15	10	2.8	0.029 U	0.03 U
		PCBs (•	•	
Aroclor 1016		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U
Aroclor 1221		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U
Aroclor 1232		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U
Aroclor 1242		0.094 U	0.09 U	1.5	0.09 U	0.096 U
Aroclor 1248		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U
Aroclor 1254		0.19 U	0.18 U	0.91 U	0.18 U	0.19 U
Aroclor 1260		0.19 U	0.18 U	0.18 U	0.18 U	0.19 U
Total PCBs	1	0.850 U	0.810 U	2.954	0.810 U	0.860 U
	Priority	Pollutant Metals a	nd Total Cyanide	(mg/kg)		
Antimony	31	1.1 UJ	NA	1 UJ	1.1 UJ	1.1 UJ
Arsenic	13.0	6.5 J	NA	4.4	7.7 J	8.1 J
Barium	5,500	67 J	NA	370 J	38 J	98 J
Beryllium	160	1	NA	5.7	0.98	1.2
Cadmium	78	0.98	NA	1.4	0.54 U	0.57 U
Chromium	230	12 J	NA	120 J	17 J	21 J
Copper	2,900	71 J	NA	400 J	28 J	24 J
Lead	400	190	NA	180 J	55	16
Mercury	23	0.15	NA	0.091	0.029 U	0.032 U
Nickel	1,600	17 J	NA	17 J	33 J	31 J
Selenium	390	1.1 U	NA	2.8	1.1 U	1.1 U
Silver	390	1.1 U	NA	1 U	1.1 U	1.1 U
Thallium	6.3	1.1 U	NA	1 U	1.4	2.1
Zinc	23,000	190 J	NA	180 J	69 J	39 J
Total Cyanide	1,600	0.26 U	NA	0.26 U	0.27 U	0.29 U

- (1) mg/kg milligrams per kilogram.(2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) NA Not analyzed.
- (8) J Indicates an estimated value.
- (9) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (10) Soil samples (SP10-001, SP18B-002, SB21-002, SB21-002, SB23-003, SB24-002, SB24-001, SP40-001, SP40-001, SB57-001, and SB58-003)
- identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	h (feet below grou	nd surface)/Conce	ntration
	Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002
Compound/Analyte	Level (mg/kg)	0-0.5	7-8	3-5	1-2	6-7
		TCL Volat	iles (mg/kg)			
Acetone	7,800	0.047 U	0.097	0.12	0.062	0.071 U
Benzene	12	0.0095 U	0.011 U	0.19	0.0092	3.6
Bromodichloromethane	10	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Bromoform	81	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Bromomethane	110	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
2-Butanone		0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Carbon Disulfide	7,800	0.0095 U	0.011 U	0.013	0.0074 U	0.014 U
Carbon Tetrachloride	5	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chlorobenzene	1,600	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chloroethane +	31,000	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Chloroform	100	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chloromethane +	310	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Dibromochloromethane	1600	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1-Dichloroethane	7,800	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,2-Dichloroethane	7	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1-Dichloroethene	700	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
cis-1,2-Dichloroethene	780	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
trans-1,2-Dichloroethene	1,600	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,2-Dichloropropane	9	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
cis-1,3-Dichloropropene	6.4	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
trans-1,3-Dichloropropene	6.4	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Ethylbenzene	7,800	0.0095 U	0.011 U	0.07	0.014	8.2
2-Hexanone +	3,100	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
4-Methyl-2-Pentanone		0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Methylene Chloride	85	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA
Styrene	16,000	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1,2,2-Tetrachloroethane +	4,700	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Tetrachloroethene	12	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Toluene	16,000	0.0095 U	0.011 U	0.011 U	0.0087	0.014 U
1,1,1-Trichloroethane		0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1,2-Trichloroethane	310	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Trichloroethene	58	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Vinyl Chloride	0.46	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
m,p-Xylene*	160,000	0.0095 U	0.011 U	0.013	0.021	5
o-Xylene*	160,000	0.0095 U	0.011 U	0.087	0.014	1.4
Xylenes, Total	160,000	NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dept		nd surface)/Conce	
	Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002
Compound/Analyte	Level (mg/kg)	0-0.5	7-8	3-5	1-2	6-7
		TCL Semivol	atiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Bis(2-chloroethyl)ether **	0.6	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Bis(2-ethylhexyl)phthalate	46	2.9	0.4 U	0.75	2.1	0.39 U
4-Bromophenyl phenyl ether		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Butyl benzyl phthalate	16,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Carbazole	32	0.41 U	0.4 U	3.7	1.1	0.39 U
4-Chloro-3-methylphenol +	5,500	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
4-Chloroaniline	310	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2-Chloronaphthalene		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2-Chlorophenol	390	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
4-Chlorophenyl phenyl ether		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Dibenzofuran +	310	0.41 U	0.4 U	0.65	2	1.2
1,2-Dichlorobenzene	7,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
1,3-Dichlorobenzene +	70	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
1,4-Dichlorobenzene		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
3,3'-Dichlorobenzidine **	1	0.81 U	0.8 U	0.75 U	0.72 U	0.77 U
2,4-Dichlorophenol	230	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Diethyl phthalate	63,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Dimethyl phthalate +	780,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Di-n-butyl phthalate	7,800	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2,4-Dimethylphenol	1,600	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
4,6-Dinitro-2-methylphenol	1,000	2 U	1.9 U	1.8 U	1.8 U	1.9 U
2,4-Dinitrophenol	160	2 U	1.9 U	1.8 U	1.8 U	1.9 U
2.4-Dinitrotoluene **	0.9	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2,6-Dinitrotoluene **	0.9	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Di-n-octyl phthalate	1,600	0.71	0.4 U	0.37 U	0.36 U	0.39 U
Hexachlorobenzene **	0.4	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Hexachlorobutadiene +	16	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Hexachlorocyclopentadiene	550	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Hexachloroethane	78	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Isophorone	15,600	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2-Methylnaphthalene +	310	0.41 U	0.4 U	0.37 U	27	23
2-Methylphenol	3,900	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
4-Methylphenol +	390	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2-Nitroaniline		2 U	1.9 U	1.8 U	1.8 U	1.9 U
3-Nitroaniline		2 U	1.9 U	1.8 U	1.8 U	1.9 U
4-Nitroaniline		2 U	1.9 U	1.8 U	1.8 U	1.9 U
Nitrobenzene	39	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2-Nitrophenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U
4-Nitrophenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U
N-Nitrosodi-n-propylamine **	0.09	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
N-Nitrosodiphenylamine	130	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.017 U	0.016 U	0.015 U	0.016 U
Pentachlorophenol **	3	2 U	1.9 U	1.8 U	1.8 U	1.9 U
Phenol	47,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
1,2,4-Trichlorobenzene	780	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2,4,5-Trichlorophenol	7,800	0.81 U	0.8 U	0.75 U	0.72 U	0.77 U
2,4,6-Trichlorophenol	58	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) ** Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued)

Tier 1 Screening: Soil Ingestion Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	h (feet below grou	nd surface)/Concer	ntration
	Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002
Compound/Analyte	Level (mg/kg)	0-0.5	7-8	3-5	1-2	6-7
	<u> </u>	PAHs ((mg/kg)			
Acenaphthene	4,700	0.031 U	0.003 U	0.51	2.4	8.6
Acenaphthylene +	2,300	0.28	0.0052	0.36	1.9	5.1
Anthracene	23,000	0.4	0.011	2.3	7.1	8.6
Benzo(a)anthracene	0.9	1.4	0.029	3.3	1.6	1.7
Benzo(b)fluoranthene	0.9	1.2	0.035	2.3	3.5	2.5
Benzo(k)fluoranthene	9	0.9	0.027	2.3	3.4	1.7
Benzo(g,h,i)perylene +	2,300	0.9	0.015	0.74	3.6	1.6
Benzo(a)pyrene	0.09	1.7	0.031	1.6	3.9	2.2
Chrysene	88	1.5	0.035	3.8	9	11
Dibenzo(a,h)anthracene	0.09	0.33	0.006	0.31	1.2	0.59
Fluoranthene	3,100	1.7	0.043	5.3	11	6.8
Fluorene	3,100	0.078	0.0052	0.92	6.9	6.7
Indeno(1,2,3-cd)pyrene	0.9	0.83	0.014	0.69	2.6	1.1
Naphthalene	1,600	0.041	0.004	0.52	10	18
Phenanthrene +	2,300	1	0.032	5.2	24	26
Pyrene	2,300	2.1	0.056	5.1	14	14
		PCBs (
Aroclor 1016		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U
Aroclor 1221		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U
Aroclor 1232		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U
Aroclor 1242		0.37	0.098 U	0.39	3.9	0.094 U
Aroclor 1248		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U
Aroclor 1254		0.28	0.2 U	0.41	3.3	0.19 U
Aroclor 1260		0.2 U	0.2 U	0.18 U	0.18 U	0.19 U
Total PCBs	1	1.246	0.890 U	1.332	7.740	0.850 U
	Priority		and Total Cyanide	(mg/kg)		
Antimony	31	1.2 UJ	1.1 UJ	1 UJ	1.1 J	1.1 UJ
Arsenic	13.0	7.2	2.8 J	7.8 J	7.2	13 J
Barium	5,500	76 J	31 J	140 J	140 J	80 J
Beryllium	160	1.1	1.1	0.6	0.84	1.1
Cadmium	78	0.75	0.54 U	1.1	1.9	0.55 U
Chromium	230	15 J	18 J	98 J	26 J	18 J
Copper	2,900	50 J	22 J	68 J	120 J	32 J
Lead	400	200 J	18	340	260 J	25
Mercury	23	1.4	0.033	0.21	0.3	0.027 U
Nickel	1,600	19 J	24 J	38 J	25 J	35 J
Selenium	390	1.2 U	1.1 U	1 U	0.9 U	1.1 U
Silver	390	1.2 U	1.1 U	1 U	0.9 U	1.1 U
Thallium	6.3	1.2 U	1.5	1 U	1.3	2
Zinc	23,000	170 J	42 J	240 J	830 J	53 J
Total Cyanide	1,600	0.33 U	0.3 U	0.29 U	0.36	0.31 U

- (1) mg/kg milligrams per kilogram.(2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route Residential Property The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	1 1 7					
	Screening	SP10-003	SP11-001	SP11-002	SP13-001	SP13-002	
Compound/Analyte	Level (mg/kg)	13-14	0-0.5	9-10	1-2	6-7	
		TCL Volat	iles (mg/kg)				
Acetone	7,800	0.053 U	0.057 U	0.078	0.062	0.12	
Benzene	12	0.92	0.011 U	0.013 U	0.012 U	0.012 U	
Bromodichloromethane	10	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
Bromoform	81	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
Bromomethane	110	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U	
2-Butanone		0.021 U	0.023 U	0.026 U	0.025 U	0.023 U	
Carbon Disulfide	7,800	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
Carbon Tetrachloride	5	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
Chlorobenzene	1,600	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
Chloroethane +	31,000	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U	
Chloroform	100	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
Chloromethane +	310	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
Dibromochloromethane	1600	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
1,1-Dichloroethane	7,800	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
1,2-Dichloroethane	7	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
1,1-Dichloroethene	700	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
cis-1,2-Dichloroethene	780	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
trans-1,2-Dichloroethene	1,600	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
1,2-Dichloropropane	9	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
cis-1,3-Dichloropropene	6.4	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
trans-1,3-Dichloropropene	6.4	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
Ethylbenzene	7,800	9	0.011 U	0.013 U	0.012 U	0.012 U	
2-Hexanone +	3,100	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U	
4-Methyl-2-Pentanone		0.021 U	0.023 U	0.026 U	0.025 U	0.023 U	
Methylene Chloride	85	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U	
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA	
Styrene	16,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
1,1,2,2-Tetrachloroethane +	4,700	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
Tetrachloroethene	12	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
Toluene	16,000	0.6	0.011 U	0.013 U	0.012 U	0.012 U	
1,1,1-Trichloroethane		0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
1,1,2-Trichloroethane	310	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
Trichloroethene	58	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U	
Vinyl Chloride	0.46	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U	
m,p-Xylene*	160,000	3.8	0.011 U	0.013 U	0.012 U	0.012 U	
o-Xylene*	160,000	12	0.011 U	0.013 U	0.012 U	0.012 U	
Xylenes, Total	160.000	NA	NA	NA	NA	NA	

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SP10-003	SP11-001	SP11-002	SP13-001	SP13-002		
Compound/Analyte	Level (mg/kg)	13-14	0-0.5	9-10	1-2	6-7		
		TCL Semivol	, U U	-	-			
Bis(2-chloroethoxy)methane		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Bis(2-chloroethyl)ether **	0.6	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Bis(2-ethylhexyl)phthalate	46	0.38 U	1.1	0.38 U	0.36 U	0.4 U		
4-Bromophenyl phenyl ether		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Butyl benzyl phthalate	16,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Carbazole	32	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
4-Chloro-3-methylphenol +	5,500	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
4-Chloroaniline	310	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2-Chloronaphthalene		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2-Chlorophenol	390	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
4-Chlorophenyl phenyl ether		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Dibenzofuran +	310	0.75	0.38 U	0.38 U	0.36 U	0.4 U		
1,2-Dichlorobenzene	7,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
1,3-Dichlorobenzene +	70	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
1,4-Dichlorobenzene		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
3,3´-Dichlorobenzidine **	1	0.77 U	0.76 U	0.77 U	0.73 U	0.8 U		
2,4-Dichlorophenol	230	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Diethyl phthalate	63,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Dimethyl phthalate +	780,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Di-n-butyl phthalate	7,800	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2,4-Dimethylphenol	1,600	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
4,6-Dinitro-2-methylphenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
2,4-Dinitrophenol	160	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
2,4-Dinitrotoluene **	0.9	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2,6-Dinitrotoluene **	0.9	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Di-n-octyl phthalate	1,600	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Hexachlorobenzene **	0.4	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Hexachlorobutadiene +	16	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Hexachlorocyclopentadiene	550	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Hexachloroethane	78	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Isophorone	15,600	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2-Methylnaphthalene +	310	20	1.1	0.42	0.86	0.53		
2-Methylphenol	3,900	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
4-Methylphenol +	390	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2-Nitroaniline		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
3-Nitroaniline		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
4-Nitroaniline		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
Nitrobenzene	39	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2-Nitrophenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
4-Nitrophenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
N-Nitrosodi-n-propylamine **	0.09	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
N-Nitrosodiphenylamine	130	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.016 U	0.015 U	0.017 U		
Pentachlorophenol **	3	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
Phenol	47,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
1,2,4-Trichlorobenzene	780	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2,4,5-Trichlorophenol	7,800	0.77 U	0.76 U	0.77 U	0.73 U	0.8 U		
2,4,6-Trichlorophenol NOTES:	58	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) **} Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.

^{(6) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued)

Tier 1 Screening: Soil Ingestion Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	h (feet below grou	nd surface)/Concer	ntration
	Screening	SP10-003	SP11-001	SP11-002	SP13-001	SP13-002
Compound/Analyte	Level (mg/kg)	13-14	0-0.5	9-10	1-2	6-7
		PAHs (mg/kg)			
Acenaphthene	4,700	5.5	1.1	0.046	0.16	0.056
Acenaphthylene +	2,300	3.7	0.86	0.029 U	0.069	0.03 U
Anthracene	23,000	3.1	2.5	0.029 U	0.13	0.03 U
Benzo(a)anthracene	0.9	0.37	0.9	0.029 U	0.037	0.03 U
Benzo(b)fluoranthene	0.9	0.42	1.7	0.029 U	0.13	0.03 U
Benzo(k)fluoranthene	9	0.49	1.6	0.029 U	0.11	0.03 U
Benzo(g,h,i)perylene +	2,300	0.51	0.62	0.029 U	0.2	0.03 U
Benzo(a)pyrene	0.09	0.45	1.8	0.029 U	0.094	0.03 U
Chrysene	88	2.2	3.1	0.032	0.26	0.03 U
Dibenzo(a,h)anthracene	0.09	0.13	0.3	0.029 U	0.084	0.03 U
Fluoranthene	3,100	1.8	3.7	0.037	0.21	0.03 U
Fluorene	3,100	3.8	1.3	0.029 U	0.15	0.03 U
Indeno(1,2,3-cd)pyrene	0.9	0.26	0.44	0.029 U	0.14	0.03 U
Naphthalene	1,600	27	1.5	0.73	0.83	0.99
Phenanthrene +	2,300	9.3	6.5	0.092	0.34	0.04
Pyrene	2,300	3	7.8	0.063	0.28	0.03 U
		PCBs (mg/kg)	•	•	
Aroclor 1016		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1221		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1232		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1242		0.09 U	0.49	0.094 U	0.98	0.097 U
Aroclor 1248		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1254		0.18 U	0.45	0.19 U	0.9 U	0.19 U
Aroclor 1260		0.18 U	0.18 U	0.19 U	0.18 U	0.19 U
Total PCBs	1	0.810 U	1.488	0.850 U	2.420	0.865 U
	Priority	Pollutant Metals a	nd Total Cyanide	(mg/kg)		
Antimony	31	1.1 UJ	1.1 UJ	1.1 UJ	1 J	1.1 UJ
Arsenic	13.0	7.5 J	5.4	11 J	7.3	9.4 J
Barium	5,500	83 J	120 J	100 J	86 J	86 J
Beryllium	160	1.1	1.1	1.1	0.79	1.2
Cadmium	78	0.55 U	1.2	0.56 U	0.7	0.57 U
Chromium	230	19 J	16 J	20 J	14 J	20 J
Copper	2,900	31 J	90 J	32 J	40 J	34 J
Lead	400	18	140 J	19	250 J	20
Mercury	23	0.028	0.1	0.028 U	2.9	0.03
Nickel	1,600	39 J	26 J	37 J	19 J	34 J
Selenium	390	1.1 U	1.1 U	1.1 U	1 U	1.1 U
Silver	390	1.1 U	1.1 U	1.1 U	1 U	1.1 U
Thallium	6.3	2.5	1.5	2	1.5	2
Zinc	23,000	49 J	220 J	47 J	94 J	45 J
Total Cyanide	1,600	0.25 U	0.89	0.27 U	0.26 U	0.3 U

- (1) mg/kg milligrams per kilogram.(2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			_ `	ind surface)/Conce	
	Screening	SP13-003	SB14-001	SB14-002	SB15-001	SB15-002
Compound/Analyte	Level (mg/kg)	15-16	1-2	6-8	0-0.5	6-8
		TCL Volat	iles (mg/kg)			
Acetone	7,800	0.055 U	0.051 U	0.078	0.037 U	0.051 U
Benzene	12	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromodichloromethane	10	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromoform	81	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromomethane	110	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
2-Butanone		0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Carbon Disulfide	7,800	0.011 U	0.01 U	0.015 U	0.0074 U	0.018
Carbon Tetrachloride	5	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chlorobenzene	1,600	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chloroethane +	31,000	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Chloroform	100	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chloromethane +	310	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Dibromochloromethane	1600	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1-Dichloroethane	7,800	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,2-Dichloroethane	7	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1-Dichloroethene	700	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
cis-1,2-Dichloroethene	780	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
trans-1,2-Dichloroethene	1,600	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,2-Dichloropropane	9	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
cis-1,3-Dichloropropene	6.4	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
trans-1,3-Dichloropropene	6.4	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Ethylbenzene	7,800	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
2-Hexanone +	3,100	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
4-Methyl-2-Pentanone		0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Methylene Chloride	85	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA
Styrene	16,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,2,2-Tetrachloroethane +	4,700	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Tetrachloroethene	12	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Toluene	16,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,1-Trichloroethane		0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,2-Trichloroethane	310	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Trichloroethene	58	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Vinyl Chloride	0.46	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
m,p-Xylene*	160,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
o-Xylene*	160,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Xylenes, Total	160,000	NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou				
	Screening	SP13-003	SB14-001	SB14-002	SB15-001	SB15-002		
Compound/Analyte	Level (mg/kg)	15-16	1-2	6-8	0-0.5	6-8		
			atiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Bis(2-chloroethyl)ether **	0.6	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Bis(2-ethylhexyl)phthalate	46	0.39 U	0.49	0.42 U	0.58	0.39 U		
4-Bromophenyl phenyl ether		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Butyl benzyl phthalate	16,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Carbazole	32	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
4-Chloro-3-methylphenol +	5,500	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
4-Chloroaniline	310	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2-Chloronaphthalene		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2-Chlorophenol	390	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
4-Chlorophenyl phenyl ether		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Dibenzofuran +	310	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
1,2-Dichlorobenzene	7,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
1,3-Dichlorobenzene +	70	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
1,4-Dichlorobenzene		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
3,3´-Dichlorobenzidine **	1	0.78 U	0.71 U	0.84 U	0.81 U	0.78 U		
2,4-Dichlorophenol	230	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Diethyl phthalate	63,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Dimethyl phthalate +	780,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Di-n-butyl phthalate	7,800	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2,4-Dimethylphenol	1,600	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
4,6-Dinitro-2-methylphenol		1.9 U	1.7 U	2 U	2 U	1.9 U		
2,4-Dinitrophenol	160	1.9 U	1.7 U	2 U	2 U	1.9 U		
2,4-Dinitrotoluene **	0.9	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2,6-Dinitrotoluene **	0.9	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Di-n-octyl phthalate	1,600	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Hexachlorobenzene **	0.4	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Hexachlorobutadiene +	16	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Hexachlorocyclopentadiene	550	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Hexachloroethane	78	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Isophorone	15,600	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2-Methylnaphthalene +	310	0.79	0.35 U	0.42 U	0.4 U	0.39 U		
2-Methylphenol	3,900	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
4-Methylphenol +	390	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2-Nitroaniline		1.9 U	1.7 U	2 U	2 U	1.9 U		
3-Nitroaniline		1.9 U	1.7 U	2 U	2 U	1.9 U		
4-Nitroaniline		1.9 U	1.7 U	2 U	2 U	1.9 U		
Nitrobenzene	39	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2-Nitrophenol		1.9 U	1.7 U	2 U	2 U	1.9 U		
4-Nitrophenol		1.9 U	1.7 U	2 U	2 U	1.9 U		
N-Nitrosodi-n-propylamine **	0.09	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
N-Nitrosodiphenylamine	130	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2, 2'-Oxybis(1-Chloropropane)	3	0.017 U 1.9 U	0.015 U 1.7 U	0.018 U 2 U	0.017 U 2 U	0.017 U 1.9 U		
Pentachlorophenol ** Phenol	47,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
	47,000 780	0.39 U 0.39 U	0.35 U 0.35 U	0.42 U 0.42 U	0.4 U 0.4 U	0.39 U 0.39 U		
1,2,4-Trichlorobenzene 2,4,5-Trichlorophenol	7,800	0.39 U 0.78 U	0.35 U 0.71 U	0.42 U 0.84 U	0.4 U 0.81 U	0.39 U 0.78 U		
	7,800 58	0.78 U 0.39 U	0.71 U 0.35 U	0.84 U 0.42 U	0.81 U 0.4 U	0.78 U 0.39 U		
2,4,6-Trichlorophenol	58	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) **} Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.

^{(6) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample l	Location and Dept	h (feet below grou	nd surface)/Concer	ntration
	Screening	SP13-003	SB14-001	SB14-002	SB15-001	SB15-002
Compound/Analyte	Level (mg/kg)	15-16	1-2	6-8	0-0.5	6-8
		PAHs ((mg/kg)			
Acenaphthene	4,700	0.077	0.15	0.032 U	0.031 U	0.03 U
Acenaphthylene +	2,300	0.03 U	0.18	0.032 U	0.13	0.03 U
Anthracene	23,000	0.03 U	0.25	0.032 U	0.031 U	0.03 U
Benzo(a)anthracene	0.9	0.03 U	3.5	0.032 U	0.15	0.03 U
Benzo(b)fluoranthene	0.9	0.03 U	1.8	0.032 U	0.13	0.03 U
Benzo(k)fluoranthene	9	0.03 U	1.6	0.032 U	0.13	0.03 U
Benzo(g,h,i)perylene +	2,300	0.03 U	0.66	0.032 U	0.17	0.03 U
Benzo(a)pyrene	0.09	0.03 U	3	0.032 U	0.2	0.03 U
Chrysene	88	0.03 U	3.2	0.032 U	0.21	0.03 U
Dibenzo(a,h)anthracene	0.09	0.03 U	0.35	0.032 U	0.057	0.03 U
Fluoranthene	3,100	0.03 U	4.2	0.035	0.24	0.087
Fluorene	3,100	0.036	0.15	0.032 U	0.031 U	0.03 U
Indeno(1,2,3-cd)pyrene	0.9	0.03 U	0.67	0.032 U	0.14	0.03 U
Naphthalene	1,600	1.1	0.19	0.11	0.031 U	0.051
Phenanthrene +	2,300	0.063	0.3	0.071	0.17	0.083
Pyrene	2,300	0.03 U	11	0.056	0.33	0.13
		PCBs (
Aroclor 1016		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1221		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1232		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1242		0.093 U	0.12	0.1 U	0.22	0.096 U
Aroclor 1248		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1254		0.19 U	0.17 U	0.2 U	0.2 U	0.19 U
Aroclor 1260		0.19 U	0.17 U	0.2 U	0.2 U	0.19 U
Total PCBs	1	0.845 U	0.800	0.900 U	1.004	0.860 U
	Priority	Pollutant Metals a	and Total Cyanide			
Antimony	31	1 UJ	0.98 UJ	1.1 UJ	1 UJ	1.1 UJ
Arsenic	13.0	9.6 J	3.3	15 J	9.3	12 J
Barium	5,500	74 J	32 J	31 J	150 J	26 J
Beryllium	160	1	0.61	1.2	0.99	1.1
Cadmium	78	0.66	0.59	0.57 U	2.2	0.57 U
Chromium	230	17 J	12 J	19 J	33 J	16 J
Copper	2,900	34 J	18 J	32 J	120 J	18 J
Lead	400	19	85 J	26	340 J	13
Mercury	23	0.061	0.06	0.031 U	0.23	0.027
Nickel	1,600	30 J	10 J	43 J	31 J	27 J
Selenium	390	1 U	0.98 U	1.1 U	1 U	1.1 U
Silver	390	1 U	0.98 U	1.1 U	1 U	1.1 U
Thallium	6.3	1.9	0.98 U	1.2	1	1.1
Zinc	23,000	42 J	91 J	47 J	550 J	36 J
Total Cyanide	1,600	0.26 U	0.28 U	0.32 U	0.32 U	0.27 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3) \ U-Indicates compound/analyte \ was analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			th (feet below grou		
	Screening	SB15-003	SP16-001	SP16-002	SP16-003	SB17-001
Compound/Analyte	Level (mg/kg)	10-12	2-3	9-10	15-16	1-2
		TCL Volat	iles (mg/kg)			
Acetone	7,800	0.1	0.053 U	0.1	0.062 U	0.06 U
Benzene	12	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromodichloromethane	10	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromoform	81	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromomethane	110	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
2-Butanone		0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Carbon Disulfide	7,800	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Carbon Tetrachloride	5	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chlorobenzene	1,600	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chloroethane +	31,000	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Chloroform	100	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chloromethane +	310	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Dibromochloromethane	1600	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1-Dichloroethane	7,800	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,2-Dichloroethane	7	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1-Dichloroethene	700	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
cis-1,2-Dichloroethene	780	0.011 U	0.053	0.0098 U	0.012 U	0.012 U
trans-1,2-Dichloroethene	1,600	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,2-Dichloropropane	9	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
cis-1,3-Dichloropropene	6.4	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
trans-1,3-Dichloropropene	6.4	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Ethylbenzene	7,800	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
2-Hexanone +	3,100	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
4-Methyl-2-Pentanone		0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Methylene Chloride	85	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA
Styrene	16,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,2,2-Tetrachloroethane +	4,700	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Tetrachloroethene	12	0.011 U	0.1	0.0098 U	0.012 U	0.012 U
Toluene	16,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,1-Trichloroethane		0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,2-Trichloroethane	310	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Trichloroethene	58	0.011 U	0.017	0.0098 U	0.012 U	0.012 U
Vinyl Chloride	0.46	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
m,p-Xylene*	160,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
o-Xylene*	160,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Xylenes, Total	160,000	NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample 1	ocation and Dent	h (feet below groun	nd surface)/Conce	ntration
	Screening	SB15-003	SP16-001	SP16-002	SP16-003	SB17-001
Compound/Analyte	Level (mg/kg)	10-12	2-3	9-10	15-16	1-2
			atiles (mg/kg)	. = -	-2 10	
Bis(2-chloroethoxy)methane		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Bis(2-chloroethyl)ether **	0.6	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Bis(2-ethylhexyl)phthalate	46	0.42 U	1.6	0.39 U	0.39 U	0.94
4-Bromophenyl phenyl ether		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Butyl benzyl phthalate	16,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Carbazole	32	0.42 U	0.75	0.39 U	0.39 U	0.36 U
4-Chloro-3-methylphenol +	5,500	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
4-Chloroaniline	310	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2-Chloronaphthalene		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2-Chlorophenol	390	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
4-Chlorophenyl phenyl ether		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Dibenzofuran +	310	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
1,2-Dichlorobenzene	7,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
1,3-Dichlorobenzene +	70	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
1,4-Dichlorobenzene		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
3,3´-Dichlorobenzidine **	1	0.85 U	0.73 U	0.77 U	0.77 U	0.73 U
2,4-Dichlorophenol	230	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Diethyl phthalate	63,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Dimethyl phthalate +	780,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Di-n-butyl phthalate	7,800	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2,4-Dimethylphenol	1,600	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
4,6-Dinitro-2-methylphenol		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
2,4-Dinitrophenol	160	2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
2,4-Dinitrotoluene **	0.9	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2,6-Dinitrotoluene **	0.9	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Di-n-octyl phthalate	1,600	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Hexachlorobenzene **	0.4	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Hexachlorobutadiene +	16	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Hexachlorocyclopentadiene	550	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Hexachloroethane	78	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Isophorone	15,600	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2-Methylnaphthalene +	310	0.42 U	0.64	0.39 U	0.39 U	0.36 U
2-Methylphenol	3,900	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
4-Methylphenol +	390	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2-Nitroaniline		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
3-Nitroaniline		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
4-Nitroaniline	39	2.1 U	1.8 U	1.9 U 0.39 U	1.9 U 0.39 U	1.8 U
Nitrobenzene 2 Nitrophonol	39	0.42 U 2.1 U	0.36 U 1.8 U	0.39 U 1.9 U	0.39 U 1.9 U	0.36 U 1.8 U
2-Nitrophenol		2.1 U 2.1 U	1.8 U 1.8 U	1.9 U 1.9 U	1.9 U 1.9 U	1.8 U 1.8 U
4-Nitrophenol N-Nitrosodi-n-propylamine **	0.09	2.1 U 0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
N-Nitrosodi-n-propylamine ** N-Nitrosodiphenylamine	130	0.42 U 0.42 U	0.36 U 0.36 U	0.39 U 0.39 U	0.39 U 0.39 U	0.36 U
N-Nitrosodiphenylamine 2, 2'-Oxybis(1-Chloropropane)	130	0.42 U 0.018 U	0.36 U 0.015 U	0.39 U 0.016 U	0.39 U 0.016 U	0.36 U 0.015 U
2, 2-Oxybis(1-Chloropropane) Pentachlorophenol **	3	2.1 U	0.015 U 1.8 U	0.016 U 1.9 U	0.016 U 1.9 U	0.015 U 1.8 U
Phenol	47,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
1,2,4-Trichlorobenzene	780	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2,4,5-Trichlorophenol	7,800	0.42 U	0.36 U	0.39 U 0.77 U	0.39 U 0.77 U	0.36 U 0.73 U
2,4,6-Trichlorophenol	58	0.42 U	0.75 U	0.77 U	0.77 U	0.75 U
NOTES:	50	0.42 U	0.50 U	0.37 U	U.37 U	U.JU U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) **} Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.

^{(6) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			th (feet below grou		
	Screening	SB15-003	SP16-001	SP16-002	SP16-003	SB17-001
Compound/Analyte	Level (mg/kg)	10-12	2-3	9-10	15-16	1-2
		PAHs (mg/kg)			
Acenaphthene	4,700	0.032 U	0.5	0.029 U	0.029 U	0.036
Acenaphthylene +	2,300	0.032 U	0.15	0.029 U	0.029 U	0.049
Anthracene	23,000	0.032 U	0.81	0.029 U	0.029 U	0.21
Benzo(a)anthracene	0.9	0.032 U	0.36	0.029 U	0.029 U	0.089
Benzo(b)fluoranthene	0.9	0.032 U	0.92	0.029 U	0.029 U	0.15
Benzo(k)fluoranthene	9	0.032 U	1.1	0.029 U	0.029 U	0.12
Benzo(g,h,i)perylene +	2,300	0.032 U	0.81	0.029 U	0.029 U	0.034
Benzo(a)pyrene	0.09	0.032 U	0.75	0.029 U	0.029 U	0.069
Chrysene	88	0.032 U	2.3	0.029 U	0.029 U	0.087
Dibenzo(a,h)anthracene	0.09	0.032 U	0.28	0.029 U	0.029 U	0.028 U
Fluoranthene	3,100	0.032 U	1.8	0.029 U	0.029 U	0.12
Fluorene	3,100	0.032 U	0.44	0.029 U	0.029 U	0.046
Indeno(1,2,3-cd)pyrene	0.9	0.032 U	0.54	0.029 U	0.029 U	0.034
Naphthalene	1,600	0.032 U	0.64	0.029 U	0.029 U	0.051
Phenanthrene +	2,300	0.032 U	2.2	0.029 U	0.029 U	0.21
Pyrene	2,300	0.032 U	2.7	0.029 U	0.029 U	0.18
		PCBs (
Aroclor 1016		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U
Aroclor 1221		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U
Aroclor 1232		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U
Aroclor 1242		0.1 U	4.7	0.094 U	0.095 U	0.15
Aroclor 1248		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U
Aroclor 1254		0.21 U	4.3	0.19 U	0.19 U	0.18 U
Aroclor 1260		0.21 U	0.18 U	0.19 U	0.19 U	0.18 U
Total PCBs	1	0.920 U	9.532	0.850 U	0.855 U	0.862
		Pollutant Metals a				
Antimony	31	1.1 UJ	1.1 J	1 UJ	1.1 UJ	1 UJ
Arsenic	13.0	5 J	6.7	12 J	9.6 J	1.4
Barium	5,500	22 J	130 J	79 J	84 J	9.4 J
Beryllium	160	1.2	1.3	1.1	1.1	0.54
Cadmium	78	0.57 U	2.3	0.52 U	0.56 U	0.5 U
Chromium	230	19 J	47 J	17 J	17 J	5.3 J
Copper	2,900	31 J	170 J	39 J	28 J	4.9 J
Lead	400	16	150 J	21	17	7.3 J
Mercury	23	0.032 U	0.43	0.027 U	0.033	0.04
Nickel	1,600	30 J	40 J	37 J	24 J	3.3 J
Selenium	390	1.1 U	1 U	1 U	1.1 U	1 U
Silver	390	1.1 U	1 U	1 U	1.1 U	1 U
Гhallium	6.3	2.5	1.4	1.8	1.7	1 U
Zinc	23,000	42 J	600 J	40 J	33 J	55 J
Total Cyanide NOTES:	1,600	0.28 U	0.26 U	0.25 U	0.28 U	0.28 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			th (feet below grou	ind surface)/Conce	
	Screening	SB18B-001	SB19-001	SB20-001	SB21-001	SB22-002
Compound/Analyte	Level (mg/kg)	1-2	1-2	0-0.5	1-2	8-10
		TCL Volat	iles (mg/kg)			
Acetone	7,800	0.062 U	0.05	0.12	0.036	0.065
Benzene	12	0.012 U	0.039	0.0084 U	0.077	0.0089 U
Bromodichloromethane	10	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Bromoform	81	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Bromomethane	110	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
2-Butanone		0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Carbon Disulfide	7,800	0.012 U	0.0081 U	0.011	0.0065 U	0.0089 U
Carbon Tetrachloride	5	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Chlorobenzene	1,600	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Chloroethane +	31,000	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Chloroform	100	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Chloromethane +	310	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Dibromochloromethane	1600	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,1-Dichloroethane	7,800	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,2-Dichloroethane	7	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,1-Dichloroethene	700	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
cis-1,2-Dichloroethene	780	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
trans-1,2-Dichloroethene	1,600	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,2-Dichloropropane	9	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
cis-1,3-Dichloropropene	6.4	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
trans-1,3-Dichloropropene	6.4	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Ethylbenzene	7,800	0.012 U	0.22	0.014	0.12	0.0089 U
2-Hexanone +	3,100	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
4-Methyl-2-Pentanone		0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Methylene Chloride	85	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA
Styrene	16,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,1,2,2-Tetrachloroethane +	4,700	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Tetrachloroethene	12	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Toluene	16,000	0.012 U	0.064	0.0097	0.018	0.0089 U
1,1,1-Trichloroethane		0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,1,2-Trichloroethane	310	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Trichloroethene	58	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Vinyl Chloride	0.46	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
m,p-Xylene*	160,000	0.012 U	0.2	0.031	0.034	0.0089 U
o-Xylene*	160,000	0.012 U	0.12	0.011	0.036	0.0089 U
Xylenes, Total	160,000	NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	1					
	Tier 1			h (feet below grou		
	Screening	SB18B-001	SB19-001	SB20-001	SB21-001	SB22-002
Compound/Analyte	Level (mg/kg)	1-2	1-2	0-0.5	1-2	8-10
	n "		latiles (mg/kg)	,	-	
Bis(2-chloroethoxy)methane		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Bis(2-chloroethyl)ether **	0.6	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Bis(2-ethylhexyl)phthalate	46	1.2	0.63	2.7	0.59 J	0.39 U
4-Bromophenyl phenyl ether		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Butyl benzyl phthalate	16,000	0.35 U	0.36 U	0.58	0.38 U	0.39 U
Carbazole	32	0.35 U	3.2	0.53	0.91 J	0.39 U
4-Chloro-3-methylphenol +	5,500	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
4-Chloroaniline	310	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2-Chloronaphthalene		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2-Chlorophenol	390	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
4-Chlorophenyl phenyl ether		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Dibenzofuran +	310	0.35 U	0.94	0.38 U	0.9 J	0.39 U
1,2-Dichlorobenzene	7,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
1,3-Dichlorobenzene +	70	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
1,4-Dichlorobenzene		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
3,3´-Dichlorobenzidine **	1	0.7 U	0.72 U	0.75 U	0.75 U	0.78 U
2,4-Dichlorophenol	230	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Diethyl phthalate	63,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Dimethyl phthalate +	780,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Di-n-butyl phthalate	7,800	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2,4-Dimethylphenol	1,600	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
4,6-Dinitro-2-methylphenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
2,4-Dinitrophenol	160	1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
2,4-Dinitrotoluene **	0.9	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2,6-Dinitrotoluene **	0.9	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Di-n-octyl phthalate	1,600	1.6	0.36 U	0.38 U	0.38 U	0.39 U
Hexachlorobenzene **	0.4	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Hexachlorobutadiene +	16	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Hexachlorocyclopentadiene	550	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Hexachloroethane	78	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Isophorone	15,600	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2-Methylnaphthalene +	310	0.47	20	0.59	2.3 J	0.39 U
2-Methylphenol	3,900	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
4-Methylphenol +	390	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
3-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
4-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
Nitrobenzene	39	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2-Nitrophenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
4-Nitrophenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
N-Nitrosodi-n-propylamine **	0.09	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
N-Nitrosodiphenylamine	130	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.015 U	0.015 U	0.016 U	0.38 U	0.39 U
Pentachlorophenol **	3	1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
Phenol	47,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
1,2,4-Trichlorobenzene	780	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2,4,5-Trichlorophenol	7,800	0.7 U	0.72 U	0.75 U	0.75 U	0.78 U
2,4,6-Trichlorophenol	58	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) J Indicates an estimated value.
- (6) ** Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (7) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- $(8)\ Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued)

Tier 1 Screening: Soil Ingestion Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample 1	Location and Dept	h (feet below grou	nd surface)/Concer	ntration
	Screening	SB18B-001	SB19-001	SB20-001	SB21-001	SB22-002
Compound/Analyte	Level (mg/kg)	1-2	1-2	0-0.5	1-2	8-10
		PAHs ((mg/kg)	<u> </u>	<u> </u>	
Acenaphthene	4,700	0.19	3.1	0.31	3.3 J	0.031
Acenaphthylene +	2,300	0.12	2.3	0.19	2.5 J	0.029 U
Anthracene	23,000	0.67	3.1	0.78	5 J	0.047
Benzo(a)anthracene	0.9	0.31	1.4	0.26	1.6 J	0.029 U
Benzo(b)fluoranthene	0.9	0.57	3.4	2	3.1 J	0.029 U
Benzo(k)fluoranthene	9	0.6	3	1.9	3.5 J	0.029 U
Benzo(g,h,i)perylene +	2,300	0.8	3	0.89	3.7 J	0.029 U
Benzo(a)pyrene	0.09	0.41	2.7	0.67	4 J	0.029 U
Chrysene	88	1.7	5.4	1.4	5.6 J	0.04
Dibenzo(a,h)anthracene	0.09	0.25	1.3	0.3	1.1 J	0.029 U
Fluoranthene	3,100	1.2	7.4	2.4	8.1 J	0.029 U
Fluorene	3,100	0.3	3.2	0.31	3.6 J	0.033
Indeno(1,2,3-cd)pyrene	0.9	0.52	2.5	0.62	2.5 J	0.029 U
Naphthalene	1,600	0.42	13	0.47	2.4 J	0.2
Phenanthrene +	2,300	1.9	9.7	2.5	13 J	0.13
Pyrene	2,300	1.8	8.9	1.9	14 J	0.029 U
		PCBs (mg/kg)	•	•	
Aroclor 1016		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U
Aroclor 1221		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U
Aroclor 1232		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U
Aroclor 1242		1.9	0.55	1.3	0.1	0.094 U
Aroclor 1248		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U
Aroclor 1254		1.6	0.52	0.91 U	0.18 U	0.19 U
Aroclor 1260		0.17 U	0.17 U	0.18 U	0.18 U	0.19 U
Total PCBs	1	4.010	1.588	2.754	0.824	0.850 U
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony	31	1 J	0.98 J	1 J	0.97 UJ	1.1 UJ
Arsenic	13.0	4	2.5	4.3	6.9	5.7 J
Barium	5,500	99 J	69 J	150 J	76 J	34 J
Beryllium	160	0.79	0.5	0.87	0.48 U	0.57 U
Cadmium	78	1.1	0.44	1.3	0.89	0.57 U
Chromium	230	12 J	9.2 J	15 J	15 J	18 J
Copper	2,900	67 J	33 J	37 J	48 J	26 J
Lead	400	130 J	46 J	94 J	120 J	22
Mercury	23	0.2	0.1	0.53	0.33	0.029
Nickel	1,600	11 J	12 J	14 J	22 J	31 J
Selenium	390	0.93 U	0.82 U	1 U	0.97 U	1.1 U
Silver	390	0.93 U	0.82 U	1 U	0.97 U	1.1 U
Thallium	6.3	1.2	1.1	1.5	0.97 U	1.2
Zinc	23,000	240 J	98 J	210 J	150 J	46 J
Total Cyanide	1,600	0.26 U	0.25 U	0.32 U	0.3 U	0.3 U

- (1) mg/kg milligrams per kilogram.(2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	nd surface)/Conce	ntration
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003
Compound/Analyte	Level (mg/kg)	1-2	1-2	1-2	3-5	12-14
		TCL Volat	iles (mg/kg)			
Acetone	7,800	0.056 U	0.056 U	0.12	0.11	0.058 U
Benzene	12	0.011 U	0.011 U	1.5	0.22	0.012 U
Bromodichloromethane	10	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Bromoform	81	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Bromomethane	110	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
2-Butanone		0.022 U	0.022 U	0.026	0.034 U	0.023 U
Carbon Disulfide	7,800	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Carbon Tetrachloride	5	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Chlorobenzene	1,600	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Chloroethane +	31,000	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
Chloroform	100	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Chloromethane +	310	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Dibromochloromethane	1600	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1-Dichloroethane	7,800	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,2-Dichloroethane	7	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1-Dichloroethene	700	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
cis-1,2-Dichloroethene	780	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
trans-1,2-Dichloroethene	1,600	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,2-Dichloropropane	9	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
cis-1,3-Dichloropropene	6.4	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
trans-1,3-Dichloropropene	6.4	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Ethylbenzene	7,800	0.011 U	0.016	2.8	4.6	0.012 U
2-Hexanone +	3,100	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
4-Methyl-2-Pentanone		0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
Methylene Chloride	85	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA
Styrene	16,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1,2,2-Tetrachloroethane +	4,700	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Tetrachloroethene	12	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Toluene	16,000	0.011 U	0.011 U	0.03	0.54	0.012 U
1,1,1-Trichloroethane		0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1,2-Trichloroethane	310	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Trichloroethene	58	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Vinyl Chloride	0.46	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
m,p-Xylene*	160,000	0.011 U	0.011 U	0.068	6.7	0.012 U
o-Xylene*	160,000	0.011 U	0.011 U	0.72	6.8	0.012 U
Xylenes, Total	160,000	NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003	
Compound/Analyte	Level (mg/kg)	1-2	1-2	1-2	3-5	12-14	
compound/marje	20,01 (mg/ng)	TCL Semivol	J.		2.5	-= * ·	
Bis(2-chloroethoxy)methane		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
Bis(2-chloroethyl)ether **	0.6	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
Bis(2-ethylhexyl)phthalate	46	2.1	1.7 U	0.36 U	1.2	0.42	
4-Bromophenyl phenyl ether		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
Butyl benzyl phthalate	16,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
Carbazole	32	1.8 U	4.1	1.9	5.7	0.4 U	
4-Chloro-3-methylphenol +	5,500	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
4-Chloroaniline	310	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
2-Chloronaphthalene		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
2-Chlorophenol	390	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
4-Chlorophenyl phenyl ether		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
Dibenzofuran +	310	1.8 U	1.7 U	0.84	4.7	0.4 U	
1,2-Dichlorobenzene	7,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
1,3-Dichlorobenzene +	70	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
1,4-Dichlorobenzene		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
3,3´-Dichlorobenzidine **	1	3.7 U	3.5 U	0.72 U	0.81 U	0.8 U	
2,4-Dichlorophenol	230	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
Diethyl phthalate	63,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
Dimethyl phthalate +	780,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
Di-n-butyl phthalate	7,800	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
2,4-Dimethylphenol	1,600	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
4,6-Dinitro-2-methylphenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U	
2,4-Dinitrophenol	160	8.9 U	8.4 U	1.7 U	2 U	1.9 U	
2,4-Dinitrotoluene **	0.9	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
2,6-Dinitrotoluene **	0.9	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
Di-n-octyl phthalate	1,600	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
Hexachlorobenzene **	0.4	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
Hexachlorobutadiene +	16	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
Hexachlorocyclopentadiene	550	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
Hexachloroethane	78	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
Isophorone	15,600	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
2-Methylnaphthalene +	310	1.8 U	1.7 U	4.1	58	0.4	
2-Methylphenol	3,900	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
4-Methylphenol +	390	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
2-Nitroaniline		8.9 U	8.4 U	1.7 U	2 U	1.9 U	
3-Nitroaniline		8.9 U	8.4 U	1.7 U	2 U	1.9 U	
4-Nitroaniline		8.9 U	8.4 U	1.7 U	2 U	1.9 U	
Nitrobenzene	39	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
2-Nitrophenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U	
4-Nitrophenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U	
N-Nitrosodi-n-propylamine **	0.09	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
N-Nitrosodiphenylamine	130	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
2, 2'-Oxybis(1-Chloropropane)	3	0.078 U 8.9 U	0.073 U 8.4 U	0.015 U 1.7 U	0.017 U 2 U	0.017 U 1.9 U	
Pentachlorophenol ** Phenol	47,000	8.9 U 1.8 U	8.4 U 1.7 U	0.36 U	0.41 U	0.4 U	
1,2,4-Trichlorobenzene	780	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U	
1,2,4-1 richlorobenzene 2,4,5-Trichlorophenol	7,800	3.7 U	3.5 U	0.36 U 0.72 U	0.41 U 0.81 U	0.4 U 0.8 U	
2,4,5-1 richlorophenol	7,800	3.7 U 1.8 U	3.5 U 1.7 U	0.72 U 0.36 U	0.81 U 0.41 U	0.8 U 0.4 U	
NOTES:	38	1.8 U	1./ U	0.30 U	0.41 U	0.4 U	

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) **} Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.

^{(6) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued)

Tier 1 Screening: Soil Ingestion Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below groun		ntration
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003
Compound/Analyte	Level (mg/kg)	1-2	1-2	1-2	3-5	12-14
		PAHs (mg/kg)			
Acenaphthene	4,700	2.1	0.63	8.3	19	0.03 U
Acenaphthylene +	2,300	5	0.34	6.1	8.9	0.03 U
Anthracene	23,000	4.1	2.1	8.1	16	0.03 U
Benzo(a)anthracene	0.9	5.9	0.29	8	14	0.03 U
Benzo(b)fluoranthene	0.9	3.1	1.5	4	7	0.03 U
Benzo(k)fluoranthene	9	3.2	1.3	3.3	7	0.03 U
Benzo(g,h,i)perylene +	2,300	1.6	1.5	2.3	3.7	0.03 U
Benzo(a)pyrene	0.09	5	1.7	5.1	9.2	0.03 U
Chrysene	88	6.6	3.6	9.1	15	0.03 U
Dibenzo(a,h)anthracene	0.09	1.4 U	0.72	0.84	0.94	0.03 U
Fluoranthene	3,100	9.4	6.4	16	20	0.03 U
Fluorene	3,100	2.4	0.67	7	26	0.067
Indeno(1,2,3-cd)pyrene	0.9	1.4 U	1.4	2.1	3.1 U	0.03 U
Naphthalene	1,600	1.8	0.65	6.7	28	0.6
Phenanthrene +	2,300	10	5.4	30	62	0.15
Pyrene	2,300	14	7	24	32	0.03 U
		PCBs (
Aroclor 1016		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U
Aroclor 1221		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U
Aroclor 1232		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U
Aroclor 1242		0.95	1.1	0.086 U	0.098 U	0.096 U
Aroclor 1248		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U
Aroclor 1254		0.72	0.9	0.17 U	0.2 U	0.19 U
Aroclor 1260		0.18 U	0.17 U	0.17 U	0.2 U	0.19 U
Total PCBs	1	2.206	2.518	0.770 U	0.890 U	0.860 U
	Priority	Pollutant Metals a	nd Total Cyanide	(mg/kg)		
Antimony	31	1.1 J	1.1 J	1.1 UJ	1.1 UJ	1.1 UJ
Arsenic	13.0	5	2.5	3.2	7.8 J	11 J
Barium	5,500	98 J	110 J	130 J	92 J	110 J
Beryllium	160	0.76	0.62	0.76	1.3	1.2
Cadmium	78	0.88	1.2	0.59	0.56 U	0.57 U
Chromium	230	10 J	13 J	7.8 J	17 J	18 J
Copper	2,900	41 J	60 J	18 J	25 J	26 J
Lead	400	140 J	150 J	61 J	58	17
Mercury	23	0.21	0.2	0.17	0.35	0.03 U
Nickel	1,600	13 J	12 J	6.9 J	29 J	28 J
Selenium	390	0.99 U	0.96 U	1.1 U	1.1 U	1.1 U
Silver	390	0.99 U	0.96 U	1.1 U	1.1 U	1.1 U
Thallium	6.3	1.4	1.3	1.4	1.8	1.9
Zinc	23,000	120 J	270 J	73 J	58 J	41 J
Total Cyanide	1,600	0.28 U	0.22 U	0.27 U	0.26 U	0.31 U

- (1) mg/kg milligrams per kilogram.(2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

1640 North Kingsbury Portion

Acetone Benzene Bromodichloromethane Bromoform Bromomethane 2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane 1,1-Dichloroethane	Screening Level (mg/kg) 7,800 12 10 81	0.046 0.0084 U	SB27-002 10-12 iles (mg/kg) 0.035 U	SB28-001 2-3	SB28-002 5-7	SB29-001 3-5
Acetone Benzene Bromodichloromethane Bromoform Bromomethane 2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane	7,800 12 10 81	TCL Volat 0.046 0.0084 U	iles (mg/kg) 0.035 U		5-7	3-5
Benzene Bromodichloromethane Bromoform Bromomethane 2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroform Chloroform Chloromethane + Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane	12 10 81	0.046 0.0084 U	0.035 U			
Benzene Bromodichloromethane Bromoform Bromomethane 2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroform Chloroform Chloromethane + Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane	12 10 81	0.0084 U				
Bromodichloromethane Bromoform Bromomethane 2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane	10 81			0.093	0.048	0.055 U
Bromoform Bromomethane 2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane	81	0.0004.11	0.0069 U	0.041	0.0076 U	0.011 U
Bromomethane 2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane		0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane		0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane	110	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane		0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane	7,800	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chloroethane + Chloroform Chloromethane + Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane	5	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chloroform Chloromethane + Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane	1,600	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chloromethane + Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane	31,000	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane	100	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1-Dichloroethane 1,2-Dichloroethane	310	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,2-Dichloroethane	1600	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
,	7,800	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1-Dichloroethene	7	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
	700	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
cis-1,2-Dichloroethene	780	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
trans-1,2-Dichloroethene	1,600	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,2-Dichloropropane	9	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
cis-1,3-Dichloropropene	6.4	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
trans-1,3-Dichloropropene	6.4	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Ethylbenzene	7,800	0.0084 U	0.0069 U	0.059	0.0076 U	0.011 U
2-Hexanone +	3,100	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
4-Methyl-2-Pentanone		0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Methylene Chloride	85	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA
Styrene	16,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,2,2-Tetrachloroethane +	4,700	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Tetrachloroethene	12	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Toluene	16,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,1-Trichloroethane		0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,2-Trichloroethane	310	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Trichloroethene	58	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Vinyl Chloride	0.46	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
m,p-Xylene*	160,000	0.0084 U	0.0069 U	0.012	0.0076 U	0.011 U
o-Xylene*	1.00.000	+				
Xylenes, Total	160,000	0.0084 U	0.0069 U	0.015	0.0076 U	0.011 U

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample 1	Location and Dept	h (feet below grou	nd surface)/Concer	ntration
	Screening	SB27-001	SB27-002	SB28-001	SB28-002	SB29-001
Compound/Analyte	Level (mg/kg)	5-7	10-12	2-3	5-7	3-5
•	<u> </u>	TCL Semivol	atiles (mg/kg)		•	
Bis(2-chloroethoxy)methane		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Bis(2-chloroethyl)ether **	0.6	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Bis(2-ethylhexyl)phthalate	46	0.38 U	0.38 U	0.45	0.4 U	0.39 U
4-Bromophenyl phenyl ether		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Butyl benzyl phthalate	16,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Carbazole	32	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4-Chloro-3-methylphenol +	5,500	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4-Chloroaniline	310	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Chloronaphthalene		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Chlorophenol	390	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4-Chlorophenyl phenyl ether		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Dibenzofuran +	310	0.38 U	0.38 U	0.5	0.4 U	0.39 U
1,2-Dichlorobenzene	7,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
1,3-Dichlorobenzene +	70	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
1,4-Dichlorobenzene		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
3,3'-Dichlorobenzidine **	1	0.76 U	0.76 U	0.78 U	0.79 U	0.78 U
2,4-Dichlorophenol	230	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Diethyl phthalate	63,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Dimethyl phthalate +	780,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Di-n-butyl phthalate	7,800	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2,4-Dimethylphenol	1,600	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4,6-Dinitro-2-methylphenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dinitrophenol	160	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dinitrotoluene **	0.9	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2,6-Dinitrotoluene **	0.9	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Di-n-octyl phthalate	1,600	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Hexachlorobenzene **	0.4	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Hexachlorobutadiene +	16	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Hexachlorocyclopentadiene	550	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Hexachloroethane	78	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Isophorone	15,600	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Methylnaphthalene +	310	0.38 U	0.38 U	1.1	0.4 U	0.39 U
2-Methylphenol	3,900	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4-Methylphenol +	390	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
3-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
Nitrobenzene	39	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Nitrophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitrophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodi-n-propylamine **	0.09	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
N-Nitrosodiphenylamine	130	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Pentachlorophenol **	3	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	47,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
1,2,4-Trichlorobenzene	780	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2,4,5-Trichlorophenol	7,800	0.76 U	0.76 U	0.78 U	0.79 U	0.78 U
2,4,6-Trichlorophenol	58	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) **} Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.

^{(6) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou	nd surface)/Concer	ntration
	Screening	SB27-001	SB27-002	SB28-001	SB28-002	SB29-001
Compound/Analyte	Level (mg/kg)	5-7	10-12	2-3	5-7	3-5
		PAHs (
Acenaphthene	4,700	0.029 U	0.029 U	1.7	0.03 U	0.035
Acenaphthylene +	2,300	0.029 U	0.029 U	1.4	0.03 U	0.029 U
Anthracene	23,000	0.029 U	0.029 U	3.5	0.03 U	0.038
Benzo(a)anthracene	0.9	0.029 U	0.029 U	1.1	0.03 U	0.029 U
Benzo(b)fluoranthene	0.9	0.029 U	0.029 U	1.8	0.03 U	0.029 U
Benzo(k)fluoranthene	9	0.029 U	0.029 U	1.9	0.03 U	0.029 U
Benzo(g,h,i)perylene +	2,300	0.029 U	0.029 U	3	0.03 U	0.029 U
Benzo(a)pyrene	0.09	0.029 U	0.029 U	2.6	0.03 U	0.029 U
Chrysene	88	0.029 U	0.029 U	3.8	0.03 U	0.052
Dibenzo(a,h)anthracene	0.09	0.029 U	0.029 U	0.89	0.03 U	0.029 U
Fluoranthene	3,100	0.029 U	0.029 U	0.051	0.03 U	0.029
Fluorene	3,100	0.029 U	0.029 U	1.1	0.03 U	0.033
Indeno(1,2,3-cd)pyrene	0.9	0.029 U	0.029 U	1.9	0.03 U	0.029 U
Naphthalene	1,600	0.029 U	0.029 U	1.4	0.03 U	0.094
Phenanthrene +	2,300	0.031	0.047	0.038	0.03 U	0.14
Pyrene	2,300	0.029 U	0.029 U	0.097	0.03 U	0.044
		PCBs (•	•	
Aroclor 1016		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U
Aroclor 1221		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U
Aroclor 1232		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U
Aroclor 1242		0.094 U	0.093 U	0.34	0.14	0.094 U
Aroclor 1248		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U
Aroclor 1254		0.19 U	0.19 U	0.2	0.19 U	0.19 U
Aroclor 1260		0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Total PCBs	1	0.850 U	0.845 U	1.102	0.904	0.850 U
	Priority	Pollutant Metals a	nd Total Cyanide	(mg/kg)		
Antimony	31	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ
Arsenic	13.0	7.1 J	7 J	6.1	9.2 J	11 J
Barium	5,500	32 J	39 J	67 J	41 J	41 J
Beryllium	160	0.53 U	0.55 U	0.55 U	0.57 U	0.57 U
Cadmium	78	0.53 U	0.55 U	0.71	0.57 U	0.57 U
Chromium	230	16 J	17 J	14 J	18 J	18 J
Copper	2,900	39 J	29 J	42 J	27 J	30 J
Lead	400	20	19	120 J	31	23
Mercury	23	0.028 U	0.028 U	0.53	0.049	0.031
Nickel	1,600	31 J	30 J	20 J	33 J	38 J
Selenium	390	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Silver	390	12	1.1 U	1.1 U	1.1 U	1.1 U
Thallium	6.3	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Zinc	23,000	50 J	42 J	150 J	61 J	46 J
Total Cyanide	1,600	0.28 U	0.27 U	0.29 U	0.3 U	0.28 U

- (1) mg/kg milligrams per kilogram.(2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			th (feet below grou	ind surface)/Conce	ntration
	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002
Compound/Analyte	Level (mg/kg)	12-14	2-3	6-8	2-3	3-5
		TCL Volat	iles (mg/kg)			
Acetone	7,800	0.067 U	0.03	0.064 U	0.067 U	0.081 U
Benzene	12	0.013 U	0.024	0.013 U	5.2	0.77
Bromodichloromethane	10	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Bromoform	81	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Bromomethane	110	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
2-Butanone		0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Carbon Disulfide	7,800	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Carbon Tetrachloride	5	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chlorobenzene	1,600	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chloroethane +	31,000	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Chloroform	100	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chloromethane +	310	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Dibromochloromethane	1600	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1-Dichloroethane	7,800	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,2-Dichloroethane	7	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1-Dichloroethene	700	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
cis-1,2-Dichloroethene	780	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
trans-1,2-Dichloroethene	1,600	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,2-Dichloropropane	9	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
cis-1,3-Dichloropropene	6.4	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
trans-1,3-Dichloropropene	6.4	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Ethylbenzene	7,800	0.013 U	0.038	0.013 U	1.5	2
2-Hexanone +	3,100	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
4-Methyl-2-Pentanone		0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Methylene Chloride	85	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA
Styrene	16,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1,2,2-Tetrachloroethane +	4,700	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Tetrachloroethene	12	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Toluene	16,000	0.013 U	0.032	0.013 U	0.77	0.016 U
1,1,1-Trichloroethane		0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1,2-Trichloroethane	310	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Trichloroethene	58	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Vinyl Chloride	0.46	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
m,p-Xylene*	160,000	0.013 U	0.047	0.013 U	0.62	0.057
o-Xylene*	160,000	0.013 U	0.029	0.013 U	0.47	0.034
Xylenes, Total	160,000	NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou			
	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002	
Compound/Analyte	Level (mg/kg)	12-14	2-3	6-8	2-3	3-5	
	п		atiles (mg/kg)	T	T		
Bis(2-chloroethoxy)methane		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Bis(2-chloroethyl)ether **	0.6	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Bis(2-ethylhexyl)phthalate	46	0.39 U	0.33 U	0.37 U	0.99	0.87	
4-Bromophenyl phenyl ether		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Butyl benzyl phthalate	16,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Carbazole	32	0.39 U	0.33 U	0.37 U	0.46	1.3	
4-Chloro-3-methylphenol +	5,500	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
4-Chloroaniline	310	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2-Chloronaphthalene		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2-Chlorophenol	390	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
4-Chlorophenyl phenyl ether		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Dibenzofuran +	310	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
1,2-Dichlorobenzene	7,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
1,3-Dichlorobenzene +	70	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
1,4-Dichlorobenzene		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
3,3´-Dichlorobenzidine **	1	0.78 U	0.33 U	0.74 U	0.66 U	0.78 U	
2,4-Dichlorophenol	230	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Diethyl phthalate	63,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Dimethyl phthalate +	780,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Di-n-butyl phthalate	7,800	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2,4-Dimethylphenol	1,600	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
4,6-Dinitro-2-methylphenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
2,4-Dinitrophenol	160	1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
2,4-Dinitrotoluene **	0.9	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2,6-Dinitrotoluene **	0.9	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Di-n-octyl phthalate	1,600	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Hexachlorobenzene **	0.4	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Hexachlorobutadiene +	16	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Hexachlorocyclopentadiene	550	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Hexachloroethane	78	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Isophorone	15,600	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2-Methylnaphthalene +	310	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2-Methylphenol	3,900	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
4-Methylphenol +	390	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2-Nitroaniline		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
3-Nitroaniline		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
4-Nitroaniline		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
Nitrobenzene	39	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2-Nitrophenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
4-Nitrophenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
N-Nitrosodi-n-propylamine **	0.09	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
N-Nitrosodiphenylamine	130	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2, 2'-Oxybis(1-Chloropropane)		0.39 U	0.33 U	0.016 U	0.014 U	0.017 U	
Pentachlorophenol **	3	1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
Phenol	47,000	0.39 U	15	0.37 U	0.33 U	0.39 U	
1,2,4-Trichlorobenzene	780	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2,4,5-Trichlorophenol	7,800	0.78 U	0.66 U	0.74 U	0.66 U	0.78 U	
2,4,6-Trichlorophenol	58	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) **} Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.

^{(6) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued)

Tier 1 Screening: Soil Ingestion Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample I	Location and Dept	h (feet below grou	nd surface)/Concer	ntration
	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002
Compound/Analyte	Level (mg/kg)	12-14	2-3	6-8	2-3	3-5
		PAHs (mg/kg)			
Acenaphthene	4,700	0.029 U	0.44	0.028 U	0.8	0.84
Acenaphthylene +	2,300	0.029 U	0.13 U	0.029	1.2	0.99
Anthracene	23,000	0.029 U	0.7	0.047	1.5	0.98
Benzo(a)anthracene	0.9	0.029 U	0.2	0.028 U	2.7	1.8
Benzo(b)fluoranthene	0.9	0.029 U	0.84	0.028 U	1.2	0.87
Benzo(k)fluoranthene	9	0.029 U	0.48	0.028 U	0.76	0.75
Benzo(g,h,i)perylene +	2,300	0.029 U	1.5	0.028 U	0.61	0.38
Benzo(a)pyrene	0.09	0.029 U	0.91	0.028 U	1.7	1.1
Chrysene	88	0.029 U	1.5	0.075	2.5	1.7
Dibenzo(a,h)anthracene	0.09	0.029 U	0.13 U	0.028 U	0.25 U	0.3 U
Fluoranthene	3,100	0.029 U	0.67	0.075	3.4	2.8
Fluorene	3,100	0.029 U	0.53	0.03	1	0.87
Indeno(1,2,3-cd)pyrene	0.9	0.029 U	1.1	0.028 U	0.56	0.34
Naphthalene	1,600	0.029 U	0.68	0.11	0.25 U	2.1
Phenanthrene +	2,300	0.036	2	0.17	3.8	3.7
Pyrene	2,300	0.029 U	1.1	0.13	4.6	4
		PCBs (mg/kg)		•	
Aroclor 1016		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1221		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1232		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1242		0.095 U	3.7	0.093 U	1.3	0.15
Aroclor 1248		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1254		0.19 U	1.8	0.19 U	1.1	0.19 U
Aroclor 1260		0.19 U	0.17 U	0.19 U	0.17 U	0.19 U
Total PCBs	1	0.855 U	6.002	0.845 U	2.910	0.902
	Priority	Pollutant Metals a	nd Total Cyanide	(mg/kg)		
Antimony	31	1.1 UJ	1 UJ	1.1 UJ	1.1 J	1.1 J
Arsenic	13.0	7.2 J	5	12 J	4.8	3.4 J
Barium	5,500	38 J	43 J	31 J	110 J	80 J
Beryllium	160	0.55 U	0.62	0.93	1	0.9
Cadmium	78	0.55 U	1.2	0.55 U	1.2	0.7
Chromium	230	17 J	16 J	19 J	29 J	13 J
Copper	2,900	27 J	33 J	29 J	91 J	35 J
Lead	400	18	120 J	18	190 J	65
Mercury	23	0.032	0.25	0.037	0.21	0.052
Nickel	1,600	32 J	18 J	31 J	18 J	11 J
Selenium	390	1.1 U	1 U	1.1 U	0.98 U	1.1 U
Silver	390	1.1 U	1 U	1.1 U	0.98 U	1.1 U
Thallium	6.3	1.1 U	1 U	1.2	1.3	1.5
Zinc	23,000	50 J	200 J	45 J	260 J	88 J
Total Cyanide	1,600	0.29 U	0.24 U	0.27 U	0.25 U	0.27 U

- (1) mg/kg milligrams per kilogram.(2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	A	Location and Dept		nd surface)/Conce	entration
	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7
		TCL Volat	iles (mg/kg)			
Acetone	7,800	0.042 U	0.12	0.064 U	0.041 U	0.14
Benzene	12	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromodichloromethane	10	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromoform	81	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromomethane	110	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
2-Butanone		0.017 U	0.027	0.026 U	0.017 U	0.024 U
Carbon Disulfide	7,800	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Carbon Tetrachloride	5	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chlorobenzene	1,600	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chloroethane +	31,000	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Chloroform	100	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chloromethane +	310	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Dibromochloromethane	1600	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1-Dichloroethane	7,800	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,2-Dichloroethane	7	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1-Dichloroethene	700	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
cis-1,2-Dichloroethene	780	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
trans-1,2-Dichloroethene	1,600	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,2-Dichloropropane	9	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
cis-1,3-Dichloropropene	6.4	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
trans-1,3-Dichloropropene	6.4	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Ethylbenzene	7,800	0.01	0.012 U	0.013 U	0.015	0.012 U
2-Hexanone +	3,100	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
4-Methyl-2-Pentanone		0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Methylene Chloride	85	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA
Styrene	16,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1,2,2-Tetrachloroethane +	4,700	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Tetrachloroethene	12	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Toluene	16,000	0.0084 U	0.012 U	0.013 U	0.013	0.012 U
1,1,1-Trichloroethane		0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1,2-Trichloroethane	310	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Trichloroethene	58	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Vinyl Chloride	0.46	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
m,p-Xylene*	160,000	0.0084 U	0.012 U	0.013 U	0.043	0.012 U
o-Xylene*	160,000	0.0084 U	0.025	0.013 U	0.033	0.012 U
Xylenes, Total	160,000	NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below ground		
	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7
		TCL Semivol	atiles (mg/kg)			
Bis(2-chloroethoxy)methane		2 U	0.4 U	0.39 U	1.8 U	0.4 U
Bis(2-chloroethyl)ether **	0.6	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Bis(2-ethylhexyl)phthalate	46	2 U	0.4 U	0.39 U	2	0.4 U
4-Bromophenyl phenyl ether		2 U	0.4 U	0.39 U	1.8 U	0.4 U
Butyl benzyl phthalate	16,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Carbazole	32	2 U	0.4 U	0.39 U	1.8 U	0.4 U
4-Chloro-3-methylphenol +	5,500	2 U	0.4 U	0.39 U	1.8 U	0.4 U
4-Chloroaniline	310	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2-Chloronaphthalene		2 U	0.4 U	0.39 U	1.8 U	0.4 U
2-Chlorophenol	390	2 U	0.4 U	0.39 U	1.8 U	0.4 U
4-Chlorophenyl phenyl ether		2 U	0.4 U	0.39 U	1.8 U	0.4 U
Dibenzofuran +	310	2 U	0.4 U	0.39 U	1.8 U	0.4 U
1,2-Dichlorobenzene	7,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U
1,3-Dichlorobenzene +	70	2 U	0.4 U	0.39 U	1.8 U	0.4 U
1,4-Dichlorobenzene		2 U	0.4 U	0.39 U	1.8 U	0.4 U
3,3´-Dichlorobenzidine **	1	4.1 U	0.81 U	0.79 U	3.5 U	0.8 U
2,4-Dichlorophenol	230	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Diethyl phthalate	63,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Dimethyl phthalate +	780,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Di-n-butyl phthalate	7,800	6.3	0.4 U	0.39 U	1.8 U	0.4 U
2,4-Dimethylphenol	1,600	2 U	0.4 U	0.39 U	1.8 U	0.4 U
4,6-Dinitro-2-methylphenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U
2,4-Dinitrophenol	160	9.9 U	2 U	1.9 U	8.6 U	1.9 U
2,4-Dinitrotoluene **	0.9	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2,6-Dinitrotoluene **	0.9	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Di-n-octyl phthalate	1,600	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Hexachlorobenzene **	0.4	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Hexachlorobutadiene +	16	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Hexachlorocyclopentadiene	550	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Hexachloroethane	78	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Isophorone	15,600	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2-Methylnaphthalene +	310	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2-Methylphenol	3,900	2 U	0.4 U	0.39 U	1.8 U	0.4 U
4-Methylphenol +	390	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2-Nitroaniline		9.9 U	2 U	1.9 U	8.6 U	1.9 U
3-Nitroaniline		9.9 U	2 U	1.9 U	8.6 U	1.9 U
4-Nitroaniline		9.9 U	2 U	1.9 U	8.6 U	1.9 U
Nitrobenzene	39	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2-Nitrophenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U
4-Nitrophenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U
N-Nitrosodi-n-propylamine **	0.09	2 U	0.4 U	0.39 U	1.8 U	0.4 U
N-Nitrosodiphenylamine	130	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2, 2'-Oxybis(1-Chloropropane)		0.087 U	0.017 U	0.017 U	0.075 U	0.017 U
Pentachlorophenol **	3	9.9 U	2 U	1.9 U	8.6 U	1.9 U
Phenol	47,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U
1,2,4-Trichlorobenzene	780	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2,4,5-Trichlorophenol	7,800	4.1 U	0.81 U	0.79 U	3.5 U	0.8 U
2,4,6-Trichlorophenol	58	2 U	0.4 U	0.39 U	1.8 U	0.4 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) ** Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued)

Tier 1 Screening: Soil Ingestion Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample l		h (feet below grou	nd surface)/Concer	ntration
	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7
		PAHs ((mg/kg)			
Acenaphthene	4,700	1.5 U	0.031 U	0.03 U	0.13 U	0.12
Acenaphthylene +	2,300	1.6	0.031 U	0.03 U	0.19	0.086
Anthracene	23,000	1.8	0.031 U	0.03 U	0.36	0.17
Benzo(a)anthracene	0.9	2.8	0.031 U	0.03 U	0.13 U	0.094
Benzo(b)fluoranthene	0.9	1.7	0.031 U	0.03 U	0.24	0.13
Benzo(k)fluoranthene	9	1.5 U	0.031 U	0.03 U	0.24	0.14
Benzo(g,h,i)perylene +	2,300	1.5 U	0.031 U	0.03 U	0.57	0.36
Benzo(a)pyrene	0.09	1.8	0.031 U	0.03 U	0.13	0.14
Chrysene	88	3.2	0.031 U	0.041	0.75	0.39
Dibenzo(a,h)anthracene	0.09	1.5 U	0.031 U	0.03 U	0.13 U	0.11
Fluoranthene	3,100	3.7	0.031 U	0.039	0.21	0.33
Fluorene	3,100	1.5 U	0.031 U	0.03 U	0.13 U	0.31
Indeno(1,2,3-cd)pyrene	0.9	1.5 U	0.031 U	0.03 U	0.29	0.24
Naphthalene	1,600	2.1	0.14	0.042	0.38	0.03 U
Phenanthrene +	2,300	4.1	0.076	0.083	1.3	0.13
Pyrene	2,300	5.5	0.047	0.033	0.36	1.2
		PCBs (•	
Aroclor 1016		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U
Aroclor 1221		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U
Aroclor 1232		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U
Aroclor 1242		2.5	0.096 U	0.094 U	0.87 U	0.098 U
Aroclor 1248		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U
Aroclor 1254		2.2	0.19 U	0.19 U	1.7 U	0.2 U
Aroclor 1260		0.18 U	0.19 U	0.19 U	1.7 U	0.2 U
Total PCBs	1	5.232	0.860 U	0.850 U	7.750 U	0.890 U
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony	31	1.1 UJ	1.1 UJ	1.1 UJ	1 UJ	1.2 UJ
Arsenic	13.0	5.9	5.1 J	17 J	1.2	7.5 J
Barium	5,500	100 J	97 J	63 J	59 J	100 J
Beryllium	160	0.86	1.2	1	0.57	1.3
Cadmium	78	0.59	0.59	0.54 U	0.54	0.59 U
Chromium	230	11 J	17 J	16 J	5.1 J	21 J
Copper	2,900	43 J	31 J	55 J	6.8 J	28 J
Lead	400	140 J	17	30	25 J	19
Mercury	23	0.28	0.046	0.023 U	0.026 U	0.031 U
Nickel	1,600	12 J	26 J	30 J	7.4 J	33 J
Selenium	390	1.1 U	1.1 U	1.1 U	1 U	1.2 U
Silver	390	1.1 U	1.1 U	1.1 U	1 U	1.2 U
Thallium	6.3	1.5	1.9	2	1.3	2.1
Zinc	23,000	69 J	54 J	43 J	29 J	53 J
Total Cyanide	1,600	0.29 U	0.34 U	0.29 U	0.27 U	0.31 U

- (1) mg/kg milligrams per kilogram.(2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			th (feet below grou		
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9
		TCL Volat	iles (mg/kg)			
Acetone	7,800	0.14	0.13	0.042 U	0.044 U	0.082
Benzene	12	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromodichloromethane	10	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromoform	81	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromomethane	110	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
2-Butanone		0.015	0.027	0.017 U	0.018 U	0.02 U
Carbon Disulfide	7,800	0.013	0.012 U	0.0084 U	0.0088 U	0.0099 U
Carbon Tetrachloride	5	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chlorobenzene	1,600	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chloroethane +	31,000	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Chloroform	100	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chloromethane +	310	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Dibromochloromethane	1600	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1-Dichloroethane	7,800	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,2-Dichloroethane	7	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1-Dichloroethene	700	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
cis-1,2-Dichloroethene	780	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
trans-1,2-Dichloroethene	1,600	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,2-Dichloropropane	9	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
cis-1,3-Dichloropropene	6.4	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
trans-1,3-Dichloropropene	6.4	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Ethylbenzene	7,800	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
2-Hexanone +	3,100	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
4-Methyl-2-Pentanone		0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Methylene Chloride	85	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA
Styrene	16,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,2,2-Tetrachloroethane +	4,700	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Tetrachloroethene	12	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Toluene	16,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,1-Trichloroethane		0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,2-Trichloroethane	310	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Trichloroethene	58	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Vinyl Chloride	0.46	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
m,p-Xylene*	160,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
o-Xylene*	160,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Xylenes, Total	160,000	NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Conc							
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002	
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9	
r para a a gara		TCL Semivol	atiles (mg/kg)		<u> </u>		
Bis(2-chloroethoxy)methane		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Bis(2-chloroethyl)ether **	0.6	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Bis(2-ethylhexyl)phthalate	46	5.6	0.39 U	0.39 U	0.42 U	0.39 U	
4-Bromophenyl phenyl ether		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Butyl benzyl phthalate	16,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Carbazole	32	0.47	0.39 U	0.39 U	0.67	0.39 U	
4-Chloro-3-methylphenol +	5,500	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
4-Chloroaniline	310	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Chloronaphthalene		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Chlorophenol	390	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
4-Chlorophenyl phenyl ether		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Dibenzofuran +	310	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
1,2-Dichlorobenzene	7,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
1,3-Dichlorobenzene +	70	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
1,4-Dichlorobenzene		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
3,3´-Dichlorobenzidine **	1	0.71 U	0.79 U	0.77 U	0.85 U	0.77 U	
2,4-Dichlorophenol	230	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Diethyl phthalate	63,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Dimethyl phthalate +	780,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Di-n-butyl phthalate	7,800	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2,4-Dimethylphenol	1.600	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
4,6-Dinitro-2-methylphenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
2,4-Dinitrophenol	160	1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
2,4-Dinitrotoluene **	0.9	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2,6-Dinitrotoluene **	0.9	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Di-n-octyl phthalate	1,600	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Hexachlorobenzene **	0.4	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Hexachlorobutadiene +	16	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Hexachlorocyclopentadiene	550	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Hexachloroethane	78	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Isophorone	15,600	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Methylnaphthalene +	310	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Methylphenol	3,900	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
4-Methylphenol +	390	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Nitroaniline		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
3-Nitroaniline		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
4-Nitroaniline		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
Nitrobenzene	39	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Nitrophenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
4-Nitrophenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
N-Nitrosodi-n-propylamine **	0.09	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
N-Nitrosodiphenylamine	130	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2, 2'-Oxybis(1-Chloropropane)		0.015 U	0.017 U	0.016 U	0.018 U	0.016 U	
Pentachlorophenol **	3	1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
Phenol	47,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
1,2,4-Trichlorobenzene	780	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2,4,5-Trichlorophenol	7,800	0.71 U	0.79 U	0.77 U	0.85 U	0.77 U	
2,4,6-Trichlorophenol	58	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) **} Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.

^{(6) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	h (feet below grou	nd surface)/Concer	ntration
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9
		PAHs ((mg/kg)			
Acenaphthene	4,700	0.11	0.03 U	0.029 U	0.13	0.029 U
Acenaphthylene +	2,300	0.082	0.03 U	0.029 U	0.074	0.029 U
Anthracene	23,000	0.15	0.03 U	0.029 U	0.33	0.029 U
Benzo(a)anthracene	0.9	0.19	0.064	0.029 U	0.17	0.029 U
Benzo(b)fluoranthene	0.9	0.47	0.041	0.029 U	0.38	0.029 U
Benzo(k)fluoranthene	9	0.53	0.056	0.029 U	0.87	0.029 U
Benzo(g,h,i)perylene +	2,300	0.57	0.037	0.029 U	0.35	0.029 U
Benzo(a)pyrene	0.09	0.33	0.072	0.029 U	0.32	0.029 U
Chrysene	88	0.71	0.066	0.029 U	1.1	0.029 U
Dibenzo(a,h)anthracene	0.09	0.076	0.03 U	0.029 U	0.19	0.029 U
Fluoranthene	3,100	0.55	0.074	0.029 U	2	0.029 U
Fluorene	3,100	0.086	0.03 U	0.029 U	0.12	0.029 U
Indeno(1,2,3-cd)pyrene	0.9	0.18	0.036	0.029 U	0.36	0.029 U
Naphthalene	1,600	0.16	0.03 U	0.029 U	0.18	0.056
Phenanthrene +	2,300	0.7	0.03 U	0.029 U	1	0.029 U
Pyrene	2,300	0.63	0.074	0.029 U	2.1	0.029 U
		PCBs ((mg/kg)			
Aroclor 1016		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1221		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1232		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1242		8.5	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1248		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1254		6	0.19 U	0.19 U	0.2 U	0.18 U
Aroclor 1260		0.17 U	0.19 U	0.19 U	0.2 U	0.18 U
Total PCBs	1	15.014	0.855 U	0.855 U	0.900 U	0.820 U
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony	31	6.5 J	1.1 UJ	1.1 UJ	1.2 UJ	0.97 UJ
Arsenic	13.0	20	5.8 J	12 J	7.2	15 J
Barium	5,500	520 J	98 J	89 J	120 J	98 J
Beryllium	160	1.4	0.83	1.1	1.1	1.2
Cadmium	78	8.1	0.56 U	0.56 U	0.72	0.53
Chromium	230	320 J	11 J	20 J	19 J	20 J
Copper	2,900	480 J	11 J	30 J	28 J	38 J
Lead	400	1400 J	36	25	61 J	22
Mercury	23	2.6	0.14	0.024 U	0.33	0.026 U
Nickel	1,600	210 J	12 J	35 J	26 J	38 J
Selenium	390	0.99 U	1.1 U	1.1 U	1.2 U	0.97 U
Silver	390	1	1.1 U	1.1 U	1.2 U	0.97 U
Thallium	6.3	1.3	2	2.2	2	2
Zinc	23,000	1600 J	40 J	49 J	73 J	46 J
Total Cyanide	1,600	0.28 U	0.29 U	0.24 U	0.35 U	0.25 U

- (1) mg/kg milligrams per kilogram.(2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	h (feet below grou	nd surface)/Conce	ntration
	Screening	SP37-003	SB38-001	SP39-001	SP39-002	SP39-003
Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11
		TCL Volat	iles (mg/kg)			
Acetone	7,800	0.066 J	0.12 J	0.036 U	0.11	0.047 U
Benzene	12	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromodichloromethane	10	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromoform	81	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromomethane	110	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
2-Butanone		0.023 U	0.029 UJ	0.014 U	0.027	0.019 U
Carbon Disulfide	7,800	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Carbon Tetrachloride	5	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chlorobenzene	1,600	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chloroethane +	31,000	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Chloroform	100	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chloromethane +	310	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Dibromochloromethane	1600	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1-Dichloroethane	7,800	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,2-Dichloroethane	7	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1-Dichloroethene	700	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
cis-1,2-Dichloroethene	780	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
trans-1,2-Dichloroethene	1,600	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,2-Dichloropropane	9	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
cis-1,3-Dichloropropene	6.4	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
trans-1,3-Dichloropropene	6.4	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Ethylbenzene	7,800	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
2-Hexanone +	3,100	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
4-Methyl-2-Pentanone		0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Methylene Chloride	85	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA
Styrene	16,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1,2,2-Tetrachloroethane +	4,700	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Tetrachloroethene	12	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Toluene	16,000	0.012 U	0.014 UJ	0.008	0.013 U	0.0094 U
1,1,1-Trichloroethane		0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1,2-Trichloroethane	310	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Trichloroethene	58	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Vinyl Chloride	0.46	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
m,p-Xylene*	160,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
o-Xylene*	160,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Xylenes, Total	160,000	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram. (2) TCL Target compound list.
- (3) J Indicates an estimated value.
- $(4)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (7) IXA Not alara/yee.

 (8) * The "total xylenes" screening level was used because it is more conservative.

 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration						
	Tier 1						
	Screening	SP37-003	SB38-001	SP39-001	SP39-002	SP39-003	
Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11	
	П		latiles (mg/kg)	1	1		
Bis(2-chloroethoxy)methane		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Bis(2-chloroethyl)ether **	0.6	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Bis(2-ethylhexyl)phthalate	46	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
4-Bromophenyl phenyl ether		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Butyl benzyl phthalate	16,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Carbazole	32	0.38 U	0.53	1.7 U	0.4 U	0.38 U	
4-Chloro-3-methylphenol +	5,500	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
4-Chloroaniline	310	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2-Chloronaphthalene		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2-Chlorophenol	390	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
4-Chlorophenyl phenyl ether		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Dibenzofuran +	310	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
1,2-Dichlorobenzene	7,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
1,3-Dichlorobenzene +	70	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
1,4-Dichlorobenzene		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
3,3´-Dichlorobenzidine **	1	0.75 U	0.83 U	3.5 U	0.8 U	0.77 U	
2,4-Dichlorophenol	230	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Diethyl phthalate	63,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Dimethyl phthalate +	780,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Di-n-butyl phthalate	7,800	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2,4-Dimethylphenol	1,600	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
4,6-Dinitro-2-methylphenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U	
2,4-Dinitrophenol	160	1.8 U	2 U	8.4 U	1.9 U	1.9 U	
2,4-Dinitrotoluene **	0.9	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2,6-Dinitrotoluene **	0.9	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Di-n-octyl phthalate	1,600	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Hexachlorobenzene **	0.4	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Hexachlorobutadiene +	16	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Hexachlorocyclopentadiene	550	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Hexachloroethane	78	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Isophorone	15,600	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2-Methylnaphthalene +	310	0.38 U	1.7	1.7 U	0.4 U	0.38 U	
2-Methylphenol	3,900	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
4-Methylphenol +	390	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2-Nitroaniline		1.8 U	2 U	8.4 U	1.9 U	1.9 U	
3-Nitroaniline		1.8 U	2 U	8.4 U	1.9 U	1.9 U	
4-Nitroaniline		1.8 U	2 U	8.4 U	1.9 U	1.9 U	
Nitrobenzene	39	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2-Nitrophenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U	
4-Nitrophenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U	
N-Nitrosodi-n-propylamine **	0.09	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
N-Nitrosodiphenylamine	130	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.018 U	0.074 U	0.017 U	0.016 U	
Pentachlorophenol **	3	1.8 U	2 U	8.4 U	1.9 U	1.9 U	
Phenol	47,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
1,2,4-Trichlorobenzene	780	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2,4,5-Trichlorophenol	7,800	0.75 U	0.83 U	3.5 U	0.8 U	0.77 U	
2,4,6-Trichlorophenol	58	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) ** Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample l	Location and Dept	h (feet below grou	nd surface)/Concer	ntration
	Screening	SP37-003	SB38-001	SP39-001	SP39-002	SP39-003
Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11
		PAHs (mg/kg)			
Acenaphthene	4,700	0.028 U	0.42	1.3 U	0.056	0.029 U
Acenaphthylene +	2,300	0.028 U	0.37	1.3 U	0.03 U	0.029 U
Anthracene	23,000	0.028 U	1.7	1.3 U	0.29	0.03
Benzo(a)anthracene	0.9	0.028 U	1.9	1.3 U	0.13	0.029 U
Benzo(b)fluoranthene	0.9	0.028 U	1.1	1.3 U	0.58	0.029 U
Benzo(k)fluoranthene	9	0.028 U	0.96	1.3 U	0.65	0.029 U
Benzo(g,h,i)perylene +	2,300	0.028 U	0.46	1.3 U	0.31	0.029 U
Benzo(a)pyrene	0.09	0.028 U	0.89	1.3 U	0.64	0.029 U
Chrysene	88	0.028 U	2.3	1.3 U	1.1	0.056
Dibenzo(a,h)anthracene	0.09	0.028 U	0.15	1.3 U	0.23	0.029 U
Fluoranthene	3,100	0.028 U	4.1	1.3 U	1.6	0.081
Fluorene	3,100	0.028 U	0.7	1.3 U	0.056	0.029 U
Indeno(1,2,3-cd)pyrene	0.9	0.028 U	0.38	1.3 U	0.3 U	0.029 U
Naphthalene	1,600	0.028 U	2	1.3 U	0.032	0.029 U
Phenanthrene +	2,300	0.028 U	5.7	1.3	0.81	0.071
Pyrene	2,300	0.028 U	4.7	2	1.7	0.076
		PCBs (U U/			
Aroclor 1016		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U
Aroclor 1221		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U
Aroclor 1232		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U
Aroclor 1242		0.092 U	0.1 U	0.087 U	0.1 U	0.14
Aroclor 1248		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U
Aroclor 1254		0.18 U	0.2 U	0.17 U	0.2 U	0.19 U
Aroclor 1260		0.18 U	0.2 U	0.17 U	0.2 U	0.19 U
Total PCBs	1	0.820 U	0.900 U	0.775 U	0.900 U	0.900
			nd Total Cyanide			
Antimony	31	1.2 UJ	1.3 UJ	1.1 UJ	6 J	1 UJ
Arsenic	13.0	7.7 J	7.7 J	1.7	10 J	8.1 J
Barium	5,500	85 J	49 J	57 J	140 J	83 J
Beryllium	160	1.1	1.1	0.59	1.1	1.1
Cadmium	78	0.59 U	0.69	0.95	1	0.51 U
Chromium	230	19 J	22 J	5.6 J	11 J	19 J
Copper	2,900	25 J	33 J	9.1 J	59 J	30 J
Lead	400	17	40	23 J	970	19
Mercury	23	0.029 U	0.051	0.025 U	6.2	0.027
Nickel	1,600	25 J	28 J	8.8 J	13 J	29 J
Selenium	390	1.2 U	1.3 U	1.1 U	1.1 U	1 U
Silver	390	1.2 U	1.3 U	1.1 U	1.1 U	1 U
Thallium	6.3	1.8	1.5	1.4	1.6	1.9
Zinc	23,000	37 J	88 J	33 J	200 J	40 J
Total Cyanide NOTES:	1,600	0.31 U	0.33 U	0.28 U	0.31 U	0.3 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			th (feet below grou		
	Screening	SP40-002	SP40-003	SP43-001	SP43-002	SP43-003
Compound/Analyte	Level (mg/kg)	7-8	14-15	2-3	3.5-4.5	11-12
		TCL Volat	iles (mg/kg)			
Acetone	7,800	0.071	0.043 U	0.15	0.063 U	0.041 U
Benzene	12	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromodichloromethane	10	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromoform	81	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromomethane	110	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
2-Butanone		0.02 U	0.017 U	0.031	0.025 U	0.017 U
Carbon Disulfide	7,800	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Carbon Tetrachloride	5	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chlorobenzene	1,600	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chloroethane +	31,000	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Chloroform	100	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chloromethane +	310	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Dibromochloromethane	1600	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1-Dichloroethane	7,800	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,2-Dichloroethane	7	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1-Dichloroethene	700	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
cis-1,2-Dichloroethene	780	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
trans-1,2-Dichloroethene	1,600	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,2-Dichloropropane	9	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
cis-1,3-Dichloropropene	6.4	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
trans-1,3-Dichloropropene	6.4	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Ethylbenzene	7,800	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
2-Hexanone +	3,100	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
4-Methyl-2-Pentanone		0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Methylene Chloride	85	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	NA
Styrene	16,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,2,2-Tetrachloroethane +	4,700	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Tetrachloroethene	12	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Toluene	16,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,1-Trichloroethane		0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,2-Trichloroethane	310	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Trichloroethene	58	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Vinyl Chloride	0.46	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
m,p-Xylene*	160,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
o-Xylene*	160,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Xylenes, Total	160,000	NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	7					
Ψ	Tier 1	^		th (feet below grou		
	Screening	SP40-002	SP40-003	SP43-001	SP43-002	SP43-003
Compound/Analyte	Level (mg/kg)	7-8	14-15	2-3	3.5-4.5	11-12
			latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Bis(2-chloroethyl)ether **	0.6	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Bis(2-ethylhexyl)phthalate	46	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Bromophenyl phenyl ether		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Butyl benzyl phthalate	16,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Carbazole	32	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Chloro-3-methylphenol +	5,500	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Chloroaniline	310	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Chloronaphthalene		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Chlorophenol	390	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Chlorophenyl phenyl ether		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Dibenzofuran +	310	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
1,2-Dichlorobenzene	7,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
1,3-Dichlorobenzene +	70	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
1,4-Dichlorobenzene		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
3,3'-Dichlorobenzidine **	1	0.77 U	0.77 U	0.85 U	0.78 U	0.78 U
2,4-Dichlorophenol	230	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Diethyl phthalate	63,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Dimethyl phthalate +	780,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Di-n-butyl phthalate	7,800	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2,4-Dimethylphenol	1,600	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4,6-Dinitro-2-methylphenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
2,4-Dinitrophenol	160	1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
2.4-Dinitrotoluene **	0.9	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2,6-Dinitrotoluene **	0.9	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Di-n-octyl phthalate	1,600	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Hexachlorobenzene **	0.4	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Hexachlorobutadiene +	16	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Hexachlorocyclopentadiene	550	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Hexachloroethane	78	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Isophorone	15,600	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Methylnaphthalene +	310	0.39 U	0.39 U	0.43 U	1.6	0.39 U
2-Methylphenol	3,900	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Methylphenol +	390	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Nitroaniline		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
3-Nitroaniline		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
4-Nitroaniline		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
Nitrobenzene	39	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Nitrophenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
4-Nitrophenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
N-Nitrosodi-n-propylamine **	0.09	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
N-Nitrosodiphenylamine	130	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.43 U	0.016 U	0.39 U 0.016 U
Pentachlorophenol **	3	1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
Phenol	47,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
1,2,4-Trichlorobenzene	780	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2,4,5-Trichlorophenol	7,800	0.39 U 0.77 U	0.39 U 0.77 U	0.43 U 0.85 U	0.39 U 0.78 U	0.39 U 0.78 U
			0.77 U 0.39 U			0.78 U 0.39 U
2,4,6-Trichlorophenol	58	0.39 U	0.39 U	0.43 U	0.39 U	U.39 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) ** Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou		
	Screening	SP40-002	SP40-003	SP43-001	SP43-002	SP43-003
Compound/Analyte	Level (mg/kg)	7-8	14-15	2-3	3.5-4.5	11-12
		PAHs (
Acenaphthene	4,700	0.029 U	0.029 U	0.072	0.062	0.029 U
Acenaphthylene +	2,300	0.029 U	0.029 U	0.17	0.074	0.029 U
Anthracene	23,000	0.029 U	0.029 U	0.032 U	0.029	0.029 U
Benzo(a)anthracene	0.9	0.029 U	0.029 U	0.045	0.09	0.029 U
Benzo(b)fluoranthene	0.9	0.029 U	0.029 U	0.12	0.13	0.029 U
Benzo(k)fluoranthene	9	0.029 U	0.029 U	0.098	0.11	0.029 U
Benzo(g,h,i)perylene +	2,300	0.029 U	0.029 U	0.062	0.087	0.029 U
Benzo(a)pyrene	0.09	0.029 U	0.029 U	0.056	0.13	0.029 U
Chrysene	88	0.029 U	0.029 U	0.3	0.16	0.029 U
Dibenzo(a,h)anthracene	0.09	0.029 U	0.029 U	0.032 U	0.038	0.029 U
Fluoranthene	3,100	0.029 U	0.029 U	0.15	0.17	0.029 U
Fluorene	3,100	0.029 U	0.029 U	0.032 U	0.16	0.029 U
Indeno(1,2,3-cd)pyrene	0.9	0.029 U	0.029 U	0.043	0.076	0.029 U
Naphthalene	1,600	0.029 U	0.029 U	0.062	0.22	0.029 U
Phenanthrene +	2,300	0.029 U	0.029 U	0.19	0.38	0.029 U
Pyrene	2,300	0.029 U	0.029 U	0.14	0.088	0.029 U
		PCBs (0 0			
Aroclor 1016		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U
Aroclor 1221		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U
Aroclor 1232		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U
Aroclor 1242		0.093 U	0.094 U	0.1 U	0.28	0.097 U
Aroclor 1248		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U
Aroclor 1254		0.19 U	0.19 U	0.21 U	0.26	0.19 U
Aroclor 1260		0.19 U	0.19 U	0.21 U	0.2 U	0.19 U
Total PCBs	1	0.845 U	0.850 U	0.920 U	1.136	0.865 U
		Pollutant Metals a		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
Antimony	31	1.1 UJ	1 UJ	1.3 UJ	NA	1 UJ
Arsenic	13.0	10 J	8.3 J	9.5	NA	9 J
Barium	5,500	88 J	87 J	170 J	NA	91 J
Beryllium	160	1.1	1.1	1.2	NA	1.1
Cadmium	78	0.56 U	0.52 U	0.85	NA	0.5 U
Chromium	230	16 J	19 J	16 J	NA	21 J
Copper	2,900	33 J	28 J	73 J	NA	30 J
Lead	400	19	17	69 J	NA	19
Mercury Nickel	1,600	0.029 U 36 J	0.028 U 28 J	0.18 20 J	NA NA	0.03 U 33 J
Selenium	390	1.1 U	1 U	1.3 U	NA NA	1 U
Silver	390	1.1 U	1 U	1.3 U	NA NA	1 U
Thallium Zinc	6.3	2.2	1.9 45 J	1.9 100 J	NA NA	1.9
	23,000	52 J			NA	46 J
Total Cyanide NOTES:	1,600	0.32 U	0.27 U	0.35 U	NA	0.27 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) NA Not analyzed.
- (8) J Indicates an estimated value.
- (9) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (10) Soil samples (SP10-001, SP18B-002, SB21-002, SB21-002, SB23-003, SB24-002, SB24-001, SP40-001, SP40-001, SB57-001, and SB58-003)
- identified as source material are not included in the TACO Tier 1 evaluation.

1640 North Kingsbury Portion

	Tier 1			th (feet below grou	nd surface)/Conce	
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12
		TCL Vola	tiles (mg/kg)			
Acetone	7,800	0.079 U	0.082	0.069 U	0.065	0.036 U
Benzene	12	0.016 U	0.0089 U	0.014 U	0.12	0.0073 U
Bromodichloromethane	10	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Bromoform	81	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Bromomethane	110	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
2-Butanone		0.031 U	0.018 U	0.028 U	0.034	0.015 U
Carbon Disulfide	7,800	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Carbon Tetrachloride	5	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Chlorobenzene	1,600	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Chloroethane +	31,000	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
Chloroform	100	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Chloromethane +	310	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Dibromochloromethane	1600	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,1-Dichloroethane	7,800	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,2-Dichloroethane	7	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,1-Dichloroethene	700	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
cis-1,2-Dichloroethene	780	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
trans-1,2-Dichloroethene	1,600	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,2-Dichloropropane	9	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
cis-1,3-Dichloropropene	6.4	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
trans-1,3-Dichloropropene	6.4	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Ethylbenzene	7,800	0.016 U	0.0089 U	0.014 U	0.37	0.0073 U
2-Hexanone +	3,100	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
4-Methyl-2-Pentanone		0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
Methylene Chloride	85	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
Methyl tert-butyl ether	780	NA	NA	NA	NA	0.0073 U
Styrene	16,000	0.016 U	0.0089 U	0.014 U	0.014	0.0073 U
1,1,2,2-Tetrachloroethane +	4,700	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Tetrachloroethene	12	0.023	0.0089 U	0.014 U	0.0094 U	0.0073 U
Toluene	16,000	0.016 U	0.0089 U	0.014 U	0.025	0.0073 U
1,1,1-Trichloroethane		0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,1,2-Trichloroethane	310	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Trichloroethene	58	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Vinyl Chloride	0.46	0.031 U	0.018 U	0.028 U	0.019 U	0.0073 U
m,p-Xylene*	160,000	0.016 U	0.0089 U	0.014 U	0.057	NA
o-Xylene*	160,000	0.016 U	0.0089 U	0.014 U	0.17	NA
Xylenes, Total	160,000	NA	NA	NA	NA	0.015 U

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ NA - Not analyzed.

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

1640 North Kingsbury Portion

	Tier 1		Location and Dept	th (feet below grou	nd surface)/Concer	
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12
		TCL Semivol	latiles (mg/kg)			
Bis(2-chloroethoxy)methane		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Bis(2-chloroethyl)ether **	0.6	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Bis(2-ethylhexyl)phthalate	46	9.7	0.4 U	0.39 U	2.1	0.43 U
4-Bromophenyl phenyl ether		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Butyl benzyl phthalate	16,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Carbazole	32	1.9 U	0.4 U	0.39 U	0.87	0.87
4-Chloro-3-methylphenol +	5,500	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
4-Chloroaniline	310	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
2-Chloronaphthalene		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
2-Chlorophenol	390	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
4-Chlorophenyl phenyl ether		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Dibenzofuran +	310	1.9 U	0.4 U	0.39 U	0.35 U	1.8
1,2-Dichlorobenzene	7,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
1,3-Dichlorobenzene +	70	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
1,4-Dichlorobenzene		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
3,3'-Dichlorobenzidine **	1	3.9 U	0.79 U	0.77 U	0.69 U	0.86 U
2,4-Dichlorophenol	230	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Diethyl phthalate	63,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Dimethyl phthalate +	780,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Di-n-butyl phthalate	7,800	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
2,4-Dimethylphenol	1.600	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
4,6-Dinitro-2-methylphenol		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U
2,4-Dinitrophenol	160	9.4 U	1.9 U	1.9 U	1.7 U	2.1 U
2.4-Dinitrotoluene **	0.9	1.9 U	0.4 U	0.39 U	0.35 U	0.22 U
2,6-Dinitrotoluene **	0.9	1.9 U	0.4 U	0.39 U	0.35 U	0.22 U
Di-n-octyl phthalate	1,600	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Hexachlorobenzene **	0.4	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Hexachlorobutadiene +	16	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Hexachlorocyclopentadiene	550	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Hexachloroethane	78	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Isophorone	15,600	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
2-Methylnaphthalene +	310	1.9 U	0.4 U	0.39 U	1.7	2.8
2-Methylphenol	3,900	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
4-Methylphenol +	390	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
2-Nitroaniline		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U
3-Nitroaniline		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U
4-Nitroaniline		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U
Nitrobenzene	39	1.9 U	0.4 U	0.39 U	0.35 U	0.22 U
2-Nitrophenol		9.4 U	1.9 U	1.9 U	1.7 U	0.43 U
4-Nitrophenol		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U
N-Nitrosodi-n-propylamine **	0.09	1.9 U	0.4 U	0.39 U	0.35 U	0.22 U
N-Nitrosodiphenylamine	130	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
2, 2'-Oxybis(1-Chloropropane)		0.082 U	0.017 U	0.016 U	0.015 U	0.43 U
Pentachlorophenol **	3	9.4 U	1.9 U	1.9 U	1.7 U	2.1 U
Phenol	47,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
1,2,4-Trichlorobenzene	780	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
2,4,5-Trichlorophenol	7,800	3.9 U	0.79 U	0.77 U	0.69 U	0.86 U
2,4,6-Trichlorophenol	58	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(6) **} Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
(6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

1640 North Kingsbury Portion

	Tier 1			h (feet below ground		
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12
			(mg/kg)			
Acenaphthene	4,700	0.15 U	0.03 U	0.029 U	0.74	4.9
Acenaphthylene +	2,300	0.15 U	0.03 U	0.029 U	0.65	0.73
Anthracene	23,000	0.16	0.03 U	0.029 U	1.9	6.4
Benzo(a)anthracene	0.9	0.15 U	0.03 U	0.029 U	2.5	5.8
Benzo(b)fluoranthene	0.9	0.78	0.03 U	0.029 U	2	4.5
Benzo(k)fluoranthene	9	0.81	0.03 U	0.029 U	1.9	4.1
Benzo(g,h,i)perylene +	2,300	1.1	0.03 U	0.029 U	1.3	2.7
Benzo(a)pyrene	0.09	0.45	0.03 U	0.029 U	2.4	5.9
Chrysene	88	0.83	0.03 U	0.029 U	3.9	5.4
Dibenzo(a,h)anthracene	0.09	0.25	0.03 U	0.029 U	0.37	0.83
Fluoranthene	3,100	0.45	0.03 U	0.029 U	4.1	13
Fluorene	3,100	0.15 U	0.03 U	0.029 U	1.2	3.8
Indeno(1,2,3-cd)pyrene	0.9	0.69	0.03 U	0.029 U	0.94	2.4
Naphthalene	1,600	0.15 U	0.03 U	0.029 U	1.8	6.5
Phenanthrene +	2,300	0.42	0.03 U	0.029 U	3.6	17
yrene	2,300	0.64	0.03 U	0.029 U	6.8	14
			(mg/kg)			
Aroclor 1016		0.094 U	0.096 U	0.093 U	0.084 U	NA
Aroclor 1221		0.094 U	0.096 U	0.093 U	0.084 U	NA
Aroclor 1232		0.094 U	0.096 U	0.093 U	0.084 U	NA
Aroclor 1242		1.5	0.096 U	0.093 U	5.2 U	NA
Aroclor 1248		0.094 U	0.096 U	0.093 U	0.084 U	NA
Aroclor 1254		1	0.19 U	0.19 U	5.2 U	NA
Aroclor 1260		0.19 U	0.19 U	0.19 U	0.17 U	NA
Гotal PCBs	1	3.066	0.860 U	0.845 U	10.906 U	NA
		Pollutant Metals a				
Antimony	31	0.98 J	1.1 UJ	1.2 UJ	0.95 UJ	NA
Arsenic	13.0	3.8	13 J	9.3 J	7.6	NA
Barium	5,500	140 J	79 J	94 J	59 J	NA
Beryllium	160	1.1	1.2	1.2	0.63	NA
Cadmium	78	1.5	0.57 U	0.58 U	1.1	NA
Chromium	230	21 J	20 J	20 J	13 J	NA
Copper	2,900	79 J	31 J	33 J	42 J	NA
ead	400	210 J	19	20	240 J	NA
Mercury	23	0.38	0.03 U	0.026 U	0.3	NA
Nickel	1,600	16 J	39 J	35 J	17 J	NA
Selenium	390	0.94 U	1.1 U	1.2 U	0.95 U	NA
Silver	390	0.94 U	1.1 U	1.2 U	0.95 U	NA
Thallium	6.3	1.3	1.8	2.3	0.95 U	NA
Zinc	23,000	290 Ј	52 J	45 J	140 J	NA
Γotal Cyanide NOTES:	1,600	0.28 U	0.32 U	0.31 U	1.3	NA

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U-Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route. (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) NA Not analyzed.
- (8) J Indicates an estimated value.
- (9) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

 (10) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)
- identified as source material are not included in the TACO Tier 1 evaluation.

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dent	th (feet below grou	ind surface)/Conce	ntration
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20
Compound/I mary to	Level (mg/kg)		iles (mg/kg)	10-10	0-10	10 - 20
Acetone	7,800	0.031 U	0.035 U	0.032 U	0.036 U	0.03 U
Benzene	12	0.0062 U	0.05	0.032 U	0.0072 U	0.0059 U
Bromodichloromethane	10	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Bromoform	81	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Bromomethane	110	0.0062 U	0.0071 U 0.014 U	0.0063 U	0.0072 U 0.014 U	0.0039 U 0.012 U
2-Butanone		0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Carbon Disulfide	7,800	0.012 U	0.014 U 0.0071 U	0.013 U 0.0065 U	0.014 U 0.0072 U	0.012 U 0.0059 U
Carbon Distillide Carbon Tetrachloride	7,800	0.0062 U	0.0071 U 0.0071 U	0.0065 U	0.0072 U	0.0059 U
Chlorobenzene	1,600 31,000	0.0062 U 0.012 U	0.0071 U 0.014 U	0.0065 U 0.013 U	0.0072 U 0.014 U	0.0059 U 0.012 U
Chloroethane + Chloroform	100	0.012 U 0.0062 U	0.014 U 0.0071 U	0.013 U 0.0065 U	0.014 U 0.0072 U	0.012 U 0.0059 U
Chloromethane +	310	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U 0.0059 U
Dibromochloromethane	1600	0.0062 U	0.0071 U	0.0065 U	0.0072 U	
1,1-Dichloroethane	7,800	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,2-Dichloroethane	7	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1-Dichloroethene	700	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
cis-1,2-Dichloroethene	780	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
trans-1,2-Dichloroethene	1,600	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,2-Dichloropropane	9	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
cis-1,3-Dichloropropene	6.4	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
trans-1,3-Dichloropropene	6.4	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Ethylbenzene	7,800	0.0062 U	0.33	0.0065 U	0.0072 U	0.0059 U
2-Hexanone +	3,100	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
4-Methyl-2-Pentanone		0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Methylene Chloride	85	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Methyl tert-butyl ether	780	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Styrene	16,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1,2,2-Tetrachloroethane +	4,700	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Tetrachloroethene	12	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Toluene	16,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1,1-Trichloroethane		0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1,2-Trichloroethane	310	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Trichloroethene	58	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Vinyl Chloride	0.46	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
m,p-Xylene*	160,000	NA	NA	NA	NA	NA
o-Xylene*	160,000	NA	NA	NA	NA	NA
Xylenes, Total	160.000	0.012 U	0.26	0.013 U	0.014 U	0.012 U
NOTES:	11					

⁽¹⁾ mg/kg - milligrams per kilogram. (2) TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(7) *} The "total xylenes" screening level was used because it is more conservative.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	-1					
	Tier 1			h (feet below grou		
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20
			latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Bis(2-chloroethyl)ether **	0.6	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Bis(2-ethylhexyl)phthalate	46	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Bromophenyl phenyl ether		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Butyl benzyl phthalate	16,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Carbazole	32	0.42 U	1.1	0.41 U	0.57	0.41 U
4-Chloro-3-methylphenol +	5,500	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Chloroaniline	310	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2-Chloronaphthalene		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2-Chlorophenol	390	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Chlorophenyl phenyl ether		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Dibenzofuran +	310	0.42 U	2.5	0.41 U	1.5	0.41 U
1,2-Dichlorobenzene	7,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
1,3-Dichlorobenzene +	70	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
1,4-Dichlorobenzene		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
3,3´-Dichlorobenzidine **	1	0.83 U	0.88 U	0.82 U	0.89 U	0.82 U
2,4-Dichlorophenol	230	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Diethyl phthalate	63,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Dimethyl phthalate +	780,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Di-n-butyl phthalate	7,800	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2,4-Dimethylphenol	1,600	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4,6-Dinitro-2-methylphenol		2 U	2.1 U	2 U	2.2 U	2 U
2,4-Dinitrophenol	160	2 U	2.1 U	2 U	2.2 U	2 U
2,4-Dinitrotoluene **	0.9	0.21 U	0.23 U	0.21 U	0.23 U	0.21 U
2,6-Dinitrotoluene **	0.9	0.21 U	0.23 U	0.21 U	0.23 U	0.21 U
Di-n-octyl phthalate	1,600	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Hexachlorobenzene **	0.4	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Hexachlorobutadiene +	16	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Hexachlorocyclopentadiene	550	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Hexachloroethane	78	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Isophorone	15,600	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2-Methylnaphthalene +	310	0.42 U	27	0.41 U	2.5	1.1
2-Methylphenol	3,900	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Methylphenol +	390	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2-Nitroaniline		2 U	2.1 U	2 U	2.2 U	2 U
3-Nitroaniline		2 U	2.1 U	2 U	2.2 U	2 U
4-Nitroaniline		2 U	2.1 U	2 U	2.2 U	2 U
Nitrobenzene	39	0.21 U	0.23 U	0.21 U	0.23 U	0.21 U
2-Nitrophenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Nitrophenol		2 U	2.1 U	2 U	2.2 U	2 U
N-Nitrosodi-n-propylamine **	0.09	0.21 U	0.23 U	0.21 U	0.23 U	0.21 U
N-Nitrosodiphenylamine	130	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2, 2'-Oxybis(1-Chloropropane)		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Pentachlorophenol **	3	2 U	2.1 U	2 U	2.2 U	2 U
Phenol	47,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
1,2,4-Trichlorobenzene	780	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2,4,5-Trichlorophenol	7,800	0.83 U	0.88 U	0.82 U	0.89 U	0.82 U
2,4,6-Trichlorophenol	58	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) **} Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.

^{(6) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued)

Tier 1 Screening: Soil Ingestion Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample l	Location and Dep	th (feet below grou	nd surface)/Conce	entration
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20
		PAHs (mg/kg)			
Acenaphthene	4,700	0.17	22	0.074	5.9	0.41
Acenaphthylene +	2,300	0.033	2.7	0.031 U	0.99	0.031 U
Anthracene	23,000	0.19	11	0.031 U	9.5	0.16
Benzo(a)anthracene	0.9	0.17	9	0.032	8.6	0.11
Benzo(b)fluoranthene	0.9	0.075	4.5	0.031 U	5.5	0.063
Benzo(k)fluoranthene	9	0.12	5.1	0.031 U	6.2	0.082
Benzo(g,h,i)perylene +	2,300	0.046	3.9	0.031 U	5.5	0.034
Benzo(a)pyrene	0.09	0.086	4.6	0.031 U	9.8	0.088
Chrysene	88	0.2	8	0.048	8.1	0.14
Dibenzo(a,h)anthracene	0.09	0.031 U	0.91	0.031 U	1.2	0.031 U
Fluoranthene	3,100	0.42	20	0.072	20	0.22
Fluorene	3,100	0.13	13	0.04	3.5	0.26
Indeno(1,2,3-cd)pyrene	0.9	0.035	2.5	0.031 U	4.2	0.031 U
Naphthalene	1,600	0.4	33	0.13	5.3	7.8
Phenanthrene +	2,300	0.6	43	0.12	21	0.52
Pyrene	2,300	0.52	26	0.088	22	0.21
		PCBs (mg/kg)			•
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Total PCBs	1	NA	NA	NA	NA	NA
	Priority	Pollutant Metals a	nd Total Cyanide	(mg/kg)		
Antimony	31	NA	NA	NA	NA	NA
Arsenic	13.0	NA	NA	NA	NA	NA
Barium	5,500	NA	NA	NA	NA	NA
Beryllium	160	NA	NA	NA	NA	NA
Cadmium	78	NA	NA	NA	NA	NA
Chromium	230	NA	NA	NA	NA	NA
Copper	2,900	NA	NA	NA	NA	NA
Lead	400	NA	NA	NA	NA	NA
Mercury	23	NA	NA	NA	NA	NA
Nickel	1,600	NA	NA	NA	NA	NA
Selenium	390	NA	NA	NA	NA	NA
Silver	390	NA	NA	NA	NA	NA
Thallium	6.3	NA	NA	NA	NA	NA
Zinc	23,000	NA	NA	NA	NA	NA
Total Cyanide	1,600	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.(2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	Screening	SB49-001	SB49B-001	SB50-002	SB50-003	SB51-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	14 - 16	20 - 22	10 -12
	'	TCL Vola	tiles (mg/kg)			
Acetone	7,800	0.029 U	0.031 U	1.9 U	0.037 UJ	0.03 U
Benzene	12	0.0059 U	0.0063 U	2.9	0.0073 UJ	3.7
Bromodichloromethane	10	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Bromoform	81	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Bromomethane	110	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
2-Butanone		0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Carbon Disulfide	7,800	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Carbon Tetrachloride	5	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Chlorobenzene	1,600	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Chloroethane +	31,000	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Chloroform	100	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Chloromethane +	310	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Dibromochloromethane	1600	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1-Dichloroethane	7,800	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,2-Dichloroethane	7	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1-Dichloroethene	700	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
cis-1,2-Dichloroethene	780	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
trans-1,2-Dichloroethene	1,600	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,2-Dichloropropane	9	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
cis-1,3-Dichloropropene	6.4	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
trans-1,3-Dichloropropene	6.4	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Ethylbenzene	7,800	0.0059 U	0.0063 U	30	0.56	5.8
2-Hexanone +	3,100	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
4-Methyl-2-Pentanone		0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Methylene Chloride	85	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Methyl tert-butyl ether	780	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Styrene	16,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1,2,2-Tetrachloroethane +	4,700	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Tetrachloroethene	12	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Toluene	16,000	0.0059 U	0.0063 U	0.38 U	0.018 J	0.0094
1,1,1-Trichloroethane		0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1,2-Trichloroethane	310	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Trichloroethene	58	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Vinyl Chloride	0.46	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
m,p-Xylene*	160,000	NA	NA	NA	NA	NA
o-Xylene*	160,000	NA	NA	NA	NA	NA
Xylenes, Total	160,000	0.012 U	0.013 U	21	2.1 Ј	3.9
NOTES:	11	•	•			

- (1) mg/kg milligrams per kilogram. (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) J Indicates an estimated value.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	nd surface)/Concer	ntration
	Screening	SB49-001	SB49B-001	SB50-002	SB50-003	SB51-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	14 - 16	20 - 22	10 -12
<u> </u>		TCL Semivo	latiles (mg/kg)	<u> </u>	<u> </u>	
Bis(2-chloroethoxy)methane		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Bis(2-chloroethyl)ether **	0.6	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Bis(2-ethylhexyl)phthalate	46	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4-Bromophenyl phenyl ether		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Butyl benzyl phthalate	16,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Carbazole	32	0.42 U	0.41 U	0.46 U	0.45 U	4.8
4-Chloro-3-methylphenol +	5,500	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4-Chloroaniline	310	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2-Chloronaphthalene		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2-Chlorophenol	390	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4-Chlorophenyl phenyl ether		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Dibenzofuran +	310	0.42 U	0.41 U	1.2	0.45 U	3.4
1,2-Dichlorobenzene	7,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
1,3-Dichlorobenzene +	70	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
1,4-Dichlorobenzene		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
3,3'-Dichlorobenzidine **	1	0.84 U	0.82 U	0.91 U	0.89 U	0.87 U
2,4-Dichlorophenol	230	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Diethyl phthalate	63,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Dimethyl phthalate +	780,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Di-n-butyl phthalate	7,800	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2,4-Dimethylphenol	1.600	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4,6-Dinitro-2-methylphenol		2 U	2 U	2.2 U	2.2 U	2.1 U
2,4-Dinitrophenol	160	2 U	2 U	2.2 U	2.2 U	2.1 U
2.4-Dinitrotoluene **	0.9	0.22 U	0.21 U	0.23 U	0.23 U	0.22 U
2,6-Dinitrotoluene **	0.9	0.22 U	0.21 U	0.23 U	0.23 U	0.22 U
Di-n-octyl phthalate	1,600	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Hexachlorobenzene **	0.4	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Hexachlorobutadiene +	16	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Hexachlorocyclopentadiene	550	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Hexachloroethane	78	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Isophorone	15,600	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2-Methylnaphthalene +	310	0.42 U	0.41 U	7.5	0.45 U	52
2-Methylphenol	3,900	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4-Methylphenol +	390	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2-Nitroaniline		2 U	2 U	2.2 U	2.2 U	2.1 U
3-Nitroaniline		2 U	2 U	2.2 U	2.2 U	2.1 U
4-Nitroaniline		2 U	2 U	2.2 U	2.2 U	2.1 U
Nitrobenzene	39	0.22 U	0.21 U	0.23 U	0.23 U	0.22 U
2-Nitrophenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4-Nitrophenol		2 U	2 U	2.2 U	2.2 U	2.1 U
N-Nitrosodi-n-propylamine **	0.09	0.22 U	0.21 U	0.23 U	0.23 U	0.22 U
N-Nitrosodiphenylamine	130	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2, 2'-Oxybis(1-Chloropropane)		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Pentachlorophenol **	3	2 U	2 U	2.2 U	2.2 U	2.1 U
Phenol	47,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
1,2,4-Trichlorobenzene	780	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2,4,5-Trichlorophenol	7,800	0.84 U	0.82 U	0.91 U	0.89 U	0.87 U
2,4,6-Trichlorophenol NOTES:	58	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) **} Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.

^{(6) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

1640 North Kingsbury Portion

	Tier 1		Location and Dept			
	Screening	SB49-001	SB49B-001	SB50-002	SB50-003	SB51-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	14 - 16	20 - 22	10 -12
			(mg/kg)			
Acenaphthene	4,700	0.32	0.031 U	3	0.086	28
Acenaphthylene +	2,300	0.19	0.031 U	0.44	0.034 U	4.1
Anthracene	23,000	0.44	0.031 U	2.6	0.18	20
Benzo(a)anthracene	0.9	1	0.035	3.9	0.42	17
Benzo(b)fluoranthene	0.9	0.78	0.031 U	2.4	0.27	8.2
Benzo(k)fluoranthene	9	0.74	0.032	3.8	0.38	7.4
Benzo(g,h,i)perylene +	2,300	0.68	0.031 U	0.74	0.077	8
Benzo(a)pyrene	0.09	1	0.041	4.4	0.46	16
Chrysene	88	1	0.053	3.1	0.42	17
Dibenzo(a,h)anthracene	0.09	0.11	0.031 U	0.24	0.037	1.4
Fluoranthene	3,100	1.9	0.058	7.2	0.66	36
Fluorene	3,100	0.24	0.031 U	2.2	0.098	21
Indeno(1,2,3-cd)pyrene	0.9	0.55	0.031 U	0.89	0.098	6.2
Naphthalene	1,600	0.2	0.041	44	0.52	67
Phenanthrene +	2,300	1.3	0.079	8.7	0.46	78
Pyrene	2,300	2.1	0.078	6.4	0.55	50
			(mg/kg)			
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Total PCBs	1	NA	NA	NA	NA	NA
			and Total Cyanide			
Antimony	31	NA	NA	NA	NA	NA
Arsenic	13.0	NA	NA	NA	NA	NA
Barium	5,500	NA	NA	NA	NA	NA
Beryllium	160	NA	NA	NA	NA	NA
Cadmium	78	NA	NA	NA	NA	NA
Chromium	230	NA	NA	NA	NA	NA
Copper	2,900	NA	NA	NA	NA	NA
Lead	400	NA	NA	NA	NA	NA
Mercury	23	NA	NA	NA	NA	NA
Nickel	1,600	NA	NA	NA	NA	NA
Selenium	390	NA	NA	NA	NA	NA
Silver	390	NA	NA	NA	NA	NA
Γhallium	6.3	NA	NA	NA	NA	NA
Zinc	23,000	NA	NA	NA	NA	NA
Total Cyanide	1,600	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U-Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)
- identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Sample Location	and Depth (feet be	elow ground surfa	ce)/Concentration	
	Screening	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	Level (mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
	·	T	CL Volatiles (mg/l	(g)			
Acetone	7,800	0.027 U	1.4 U	0.027 UJ	0.036 U	0.1	0.031 UJ
Benzene	12	0.0055 U	2.6	0.0089 J	0.0086	0.21	0.0062 UJ
Bromodichloromethane	10	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Bromoform	81	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Bromomethane	110	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
2-Butanone		0.011 U	0.55 U	0.011 UJ	0.015 U	0.023	0.012 UJ
Carbon Disulfide	7,800	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Carbon Tetrachloride	5	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chlorobenzene	1,600	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chloroethane +	31,000	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
Chloroform	100	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chloromethane +	310	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Dibromochloromethane	1600	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1-Dichloroethane	7,800	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,2-Dichloroethane	7	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1-Dichloroethene	700	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
cis-1,2-Dichloroethene	780	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
trans-1,2-Dichloroethene	1,600	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,2-Dichloropropane	9	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
cis-1,3-Dichloropropene	6.4	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
trans-1,3-Dichloropropene	6.4	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Ethylbenzene	7,800	0.0055 U	11	0.043 J	0.0073 U	1.2	0.0062 UJ
2-Hexanone +	3,100	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
4-Methyl-2-Pentanone		0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
Methylene Chloride	85	0.011 U	0.55 U	0.011 UJ	0.018	0.035	0.026 J
Methyl tert-butyl ether	780	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Styrene	16,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1,2,2-Tetrachloroethane +	4,700	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Tetrachloroethene	12	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Toluene	16,000	0.0055 U	0.7	0.0097 J	0.0073 U	0.013	0.0062 UJ
1,1,1-Trichloroethane		0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1,2-Trichloroethane	310	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Trichloroethene	58	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Vinyl Chloride	0.46	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
m,p-Xylene*	160,000	NA	NA	NA	NA	NA	NA
o-Xylene*	160,000	NA	NA	NA	NA	NA	NA
Xylenes, Total	160,000	0.024	9.8	0.055 J	0.015 U	1.7	0.012 UJ

- (1) mg/kg milligrams per kilogram. (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) J Indicates an estimated value.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued)

Tier 1 Screening: Soil Ingestion Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Ti 1		Communication of the contraction	and Dandle (fact to	1a a)/Ct:	
	Tier 1	CD51 002		and Depth (feet be			CD 52, 002
Commons 1/A = 1-4	Screening	SB51-002	SB52-001 6 - 8	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	Level (mg/kg)	18 - 20		12 - 14	8 - 10	14 - 16	18 - 20
Dis(2 ald and described and	П		Semivolatiles (m		O 41 TT	0.42.11	0.4.11
Bis(2-chloroethoxy)methane	0.6	0.41 U 0.41 U	0.4 U 0.4 U	0.39 U 0.39 U	0.41 U 0.41 U	0.43 U 0.43 U	0.4 U 0.4 U
Bis(2-chloroethyl)ether **							
Bis(2-ethylhexyl)phthalate	46	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Bromophenyl phenyl ether		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Butyl benzyl phthalate	16,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Carbazole	32	0.41 U	0.4 U	0.39 U	0.41 U	5.1	0.4 U
4-Chloro-3-methylphenol +	5,500	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Chloroaniline	310	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Chloronaphthalene		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Chlorophenol	390	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Chlorophenyl phenyl ether		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Dibenzofuran +	310	0.82	0.91	0.39 U	0.41 U	4.9	0.4 U
1,2-Dichlorobenzene	7,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,3-Dichlorobenzene +	70	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,4-Dichlorobenzene		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
3,3'-Dichlorobenzidine **	1	0.82 U	0.8 U	0.77 U	0.82 U	0.85 U	0.8 U
2,4-Dichlorophenol	230	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Diethyl phthalate	63,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Dimethyl phthalate +	780,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Di-n-butyl phthalate	7,800	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2,4-Dimethylphenol	1,600	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
2,4-Dinitrophenol	160	2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
2,4-Dinitrotoluene **	0.9	0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
2,6-Dinitrotoluene **	0.9	0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
Di-n-octyl phthalate	1,600	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorobenzene **	0.4	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorobutadiene +	16	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorocyclopentadiene	550	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachloroethane	78	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Isophorone	15,600	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Methylnaphthalene +	310	4.5	19	1.8	0.41 U	37	0.4 U
2-Methylphenol	3,900	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Methylphenol +	390	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
3-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
4-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
Nitrobenzene	39	0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
2-Nitrophenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Nitrophenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
N-Nitrosodi-n-propylamine **	0.09	0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
N-Nitrosodiphenylamine	130	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2, 2'-Oxybis(1-Chloropropane)		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Pentachlorophenol **	3	2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
Phenol	47,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,2,4-Trichlorobenzene	780	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2,4,5-Trichlorophenol	7,800	0.82 U	0.8 U	0.77 U	0.82 U	0.85 U	0.8 U
2,4,6-Trichlorophenol	58	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(6) **} Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
(6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued)

Tier 1 Screening: Soil Ingestion Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			and Depth (feet be			
	Screening	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	Level (mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
			PAHs (mg/kg)				
Acenaphthene	4,700	2.4	3.7	0.19	2	16	0.11
Acenaphthylene +	2,300	0.47	1	0.066	1.6	2.4	0.046
Anthracene	23,000	2.2	2.2	0.12	2.6	16	0.12
Benzo(a)anthracene	0.9	2.3	1.8	0.091	5.2	14	0.12
Benzo(b)fluoranthene	0.9	1.2	0.71	0.038	1.4	6.4	0.054
Benzo(k)fluoranthene	9	1.1	0.31	0.035	1.8	6.5	0.076
Benzo(g,h,i)perylene +	2,300	0.57	0.18	0.029 U	1	1.6	0.042
Benzo(a)pyrene	0.09	1.7	1.3	0.07	4.8	11	0.099
Chrysene	88	2	1.7	0.096	6.8	15	0.14
Dibenzo(a,h)anthracene	0.09	0.11	0.1	0.029 U	0.5	1.2	0.03 U
Fluoranthene	3,100	3.7	2.7	0.15	7.8	24	0.22
Fluorene	3,100	2.5	3.6	0.2	4	19	0.13
Indeno(1,2,3-cd)pyrene	0.9	0.59	0.35	0.029 U	0.92	1.8	0.031
Naphthalene	1,600	6.1	22	2.3	1.5	41	0.24
Phenanthrene +	2,300	7.6	11	0.65	14	57	0.48
Pyrene	2,300	4.2	4.5	0.22	12	27	0.27
			PCBs (mg/kg)				
Aroclor 1016		NA	NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA	NA
Total PCBs	1	NA	NA	NA	NA	NA	NA
		Priority Pollutar	nt Metals and Total	Cyanide (mg/kg)			
Antimony	31	NA	NA	NA	NA	NA	NA
Arsenic	13.0	NA	NA	NA	NA	NA	NA
Barium	5,500	NA	NA	NA	NA	NA	NA
Beryllium	160	NA	NA	NA	NA	NA	NA
Cadmium	78	NA	NA	NA	NA	NA	NA
Chromium	230	NA	NA	NA	NA	NA	NA
Copper	2,900	NA	NA	NA	NA	NA	NA
Lead	400	NA	NA	NA	NA	NA	NA
Mercury	23	NA	NA	NA	NA	NA	NA
Nickel	1,600	NA	NA	NA	NA	NA	NA
Selenium	390	NA	NA	NA	NA	NA	NA
Silver	390	NA	NA	NA	NA	NA	NA
Гhallium	6.3	NA	NA	NA	NA	NA	NA
Zinc	23,000	NA	NA	NA	NA	NA	NA
Total Cyanide	1,600	NA	NA	NA	NA	NA	NA

- mg/kg milligrams per kilogram.
 PAHs Polynuclear Aromatic Hydrocarbons.
- $(3) \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)
- identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dep	th (feet below grou	and surface)/Conce	entration
	Screening	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20
		TCL Volat	iles (mg/kg)			
Acetone	7,800	3.2 U	0.027 U	0.026	0.032 U	0.028 U
Benzene	12	5.7	0.0054 U	0.064	0.0064 U	0.0056 U
Bromodichloromethane	10	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Bromoform	81	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Bromomethane	110	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
2-Butanone		1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Carbon Disulfide	7,800	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Carbon Tetrachloride	5	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Chlorobenzene	1,600	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Chloroethane +	31,000	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Chloroform	100	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Chloromethane +	310	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Dibromochloromethane	1600	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,1-Dichloroethane	7,800	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,2-Dichloroethane	7	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,1-Dichloroethene	700	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
cis-1,2-Dichloroethene	780	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
trans-1,2-Dichloroethene	1,600	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,2-Dichloropropane	9	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
cis-1,3-Dichloropropene	6.4	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
trans-1,3-Dichloropropene	6.4	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Ethylbenzene	7,800	25	0.0054 U	0.11	0.0064 U	0.0056 U
2-Hexanone +	3,100	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
4-Methyl-2-Pentanone		1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Methylene Chloride	85	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Methyl tert-butyl ether	780	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Styrene	16,000	0.64 U	0.0054 U	0.016	0.0064 U	0.0056 U
1,1,2,2-Tetrachloroethane +	4,700	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Tetrachloroethene	12	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Toluene	16,000	0.84	0.0054 U	0.066	0.0064 U	0.0056 U
1,1,1-Trichloroethane		0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,1,2-Trichloroethane	310	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Trichloroethene	58	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Vinyl Chloride **	0.46	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
m,p-Xylene*	160,000	NA	NA	NA	NA	NA
o-Xylene*	160,000	NA	NA	NA	NA	NA
Xylenes, Total	160,000	8.7	0.011 U	0.18	0.013 U	0.011 U

- (1) mg/kg milligrams per kilogram.(2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.

- (0) NA Not analyzed.

 (7) * The "total xylenes" screening level was used because it is more conservative.

 (8) ** Values exceeded TACO screening level but were consistently non-detect, so no values were shaded.

 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1				and surface)/Conce	
	Screening	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20
			latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Bis(2-chloroethyl)ether **	0.6	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Bis(2-ethylhexyl)phthalate	46	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
4-Bromophenyl phenyl ether		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Butyl benzyl phthalate	16,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Carbazole	32	0.51	0.4 U	0.39 U	0.4 U	0.4 U
4-Chloro-3-methylphenol +	5,500	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
4-Chloroaniline	310	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
2-Chloronaphthalene		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
2-Chlorophenol	390	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
4-Chlorophenyl phenyl ether		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Dibenzofuran +	310	1.9	0.4 U	0.39 U	0.4 U	0.4 U
1,2-Dichlorobenzene	7,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
1,3-Dichlorobenzene +	70	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
1,4-Dichlorobenzene		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
3,3´-Dichlorobenzidine **	1	0.84 U	0.79 U	0.79 U	0.81 U	0.81 U
2,4-Dichlorophenol	230	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Diethyl phthalate	63,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Dimethyl phthalate +	780,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Di-n-butyl phthalate	7,800	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
2,4-Dimethylphenol	1,600	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.9 U	2 U	2 U
2,4-Dinitrophenol	160	2 U	1.9 U	1.9 U	2 U	2 U
2,4-Dinitrotoluene **	0.9	0.22 U	0.2 U	0.2 U	0.21 U	0.21 U
2,6-Dinitrotoluene **	0.9	0.22 U	0.2 U	0.2 U	0.21 U	0.21 U
Di-n-octyl phthalate	1,600	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Hexachlorobenzene **	0.4	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Hexachlorobutadiene +	16	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Hexachlorocyclopentadiene	550	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Hexachloroethane	78	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Isophorone	15,600	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
2-Methylnaphthalene +	310	45	0.4 U	0.8	0.4 U	0.4 U
2-Methylphenol	3,900	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
4-Methylphenol +	390	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
2-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2 U
3-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2 U
4-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2 U
Nitrobenzene	39	0.22 U	0.2 U	0.2 U	0.21 U	0.21 U
2-Nitrophenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
4-Nitrophenol		2 U	1.9 U	1.9 U	2 U	2 U
N-Nitrosodi-n-propylamine **	0.09	0.22 U	0.2 U	0.2 U	0.21 U	0.21 U
N-Nitrosodiphenylamine	130	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
2, 2'-Oxybis(1-Chloropropane)		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Pentachlorophenol **	3	2 U	1.9 U	1.9 U	2 U	2 U
Phenol	47,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
1,2,4-Trichlorobenzene	780	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
2,4,5-Trichlorophenol	7,800	0.84 U	0.79 U	0.79 U	0.81 U	0.81 U
2,4,6-Trichlorophenol	58	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dep			
	Screening	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20
		PAHs	(mg/kg)			
Acenaphthene	4,700	12	0.046	0.078	0.03 U	0.031 U
Acenaphthylene +	2,300	4	0.03 U	0.089	0.03 U	0.031 U
Anthracene	23,000	7.4	0.046	0.099	0.03 U	0.031 U
Benzo(a)anthracene	0.9	5.4	0.037	0.098	0.03 U	0.031 U
Benzo(b)fluoranthene	0.9	2.6	0.03 U	0.054	0.03 U	0.031 U
Benzo(k)fluoranthene	9	2.1	0.03 U	0.05	0.03 U	0.031 U
Benzo(g,h,i)perylene +	2,300	1.8	0.03 U	0.033	0.03 U	0.031 U
Benzo(a)pyrene	0.09	4.8	0.034	0.092	0.03 U	0.031 U
Chrysene	88	5.3	0.045	0.1	0.03 U	0.031 U
Dibenzo(a,h)anthracene	0.09	0.6	0.03 U	0.029 U	0.03 U	0.031 U
Fluoranthene	3,100	9.6	0.062	0.16	0.03 U	0.031 U
Fluorene	3,100	9.3	0.049	0.15	0.03 U	0.031 U
Indeno(1,2,3-cd)pyrene	0.9	1.6	0.03 U	0.029 U	0.03 U	0.031 U
Naphthalene	1,600	110	0.26	0.95	0.03 U	0.031 U
Phenanthrene +	2,300	27	0.15	0.58	0.067	0.037
Pyrene	2,300	14	0.095	0.31	0.03 U	0.031 U
		PCBs	(mg/kg)			
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Total PCBs	1	NA	NA	NA	NA	NA
	Priority	Pollutant Metals	and Total Cyanide	(mg/kg)		
Antimony	31	NA	NA	NA	NA	NA
Arsenic	13.0	NA	NA	NA	NA	NA
Barium	5,500	NA	NA	NA	NA	NA
Beryllium	160	NA	NA	NA	NA	NA
Cadmium	78	NA	NA	NA	NA	NA
Chromium	230	NA	NA	NA	NA	NA
Copper	2,900	NA	NA	NA	NA	NA
Lead	400	NA	NA	NA	NA	NA
Mercury	23	NA	NA	NA	NA	NA
Nickel	1,600	NA	NA	NA	NA	NA
Selenium	390	NA	NA	NA	NA	NA
Silver	390	NA	NA	NA	NA	NA
Thallium	6.3	NA	NA	NA	NA	NA
Zinc	23,000	NA	NA	NA	NA	NA
Total Cyanide	1,600	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U-Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route Residential Property The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1		Location and Dep	th (feet below grou	nd surface)/Conce	ntration
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18
		TCL Vola	tiles (mg/kg)			
Acetone	7,800	0.028 U	0.047 U	0.031 UJ	0.028 U	0.033 U
Benzene	12	0.0057 U	0.0094 U	0.0061 UJ	0.031	0.0067 U
Bromodichloromethane	10	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Bromoform	81	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Bromomethane	110	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
2-Butanone		0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
Carbon Disulfide	7,800	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Carbon Tetrachloride	5	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Chlorobenzene	1,600	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Chloroethane +	31,000	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
Chloroform	100	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Chloromethane +	310	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Dibromochloromethane	1600	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1-Dichloroethane	7,800	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,2-Dichloroethane	7	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1-Dichloroethene	700	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
cis-1,2-Dichloroethene	780	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
trans-1,2-Dichloroethene	1,600	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,2-Dichloropropane	9	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
cis-1,3-Dichloropropene	6.4	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
trans-1,3-Dichloropropene	6.4	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Ethylbenzene	7,800	0.0057 U	0.0094 U	0.0061 UJ	0.071	0.0067 U
2-Hexanone +	3,100	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
4-Methyl-2-Pentanone		0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
Methylene Chloride	85	0.011 U	0.019 U	0.012 UJ	0.017	0.016
Methyl tert-butyl ether	780	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Styrene	16,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1,2,2-Tetrachloroethane +	4,700	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Tetrachloroethene	12	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Toluene	16,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1,1-Trichloroethane		0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1,2-Trichloroethane	310	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Trichloroethene	58	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Vinyl Chloride	0.46	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
m,p-Xylene*	160,000	NA	NA	NA	NA	NA
o-Xylene*	160,000	NA	NA	NA	NA	NA
Xylenes, Total	160,000	0.011 U	0.019 U	0.012 UJ	0.044	0.013 U
NOTES:	100,000		2.2.2	O J		0.0.0

- (1) mg/kg milligrams per kilogram. (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) J Indicates an estimated value.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route Residential Property The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

					4 0	
	Tier 1			th (feet below grou	·	
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18
			latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Bis(2-chloroethyl)ether **	0.6	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Bis(2-ethylhexyl)phthalate	46	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4-Bromophenyl phenyl ether		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Butyl benzyl phthalate	16,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Carbazole	32	0.39 U	6.8	0.41 U	0.39 U	0.38 U
4-Chloro-3-methylphenol +	5,500	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4-Chloroaniline	310	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2-Chloronaphthalene		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2-Chlorophenol	390	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4-Chlorophenyl phenyl ether		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Dibenzofuran +	310	0.39 U	4.6	0.41 U	0.39 U	0.38 U
1,2-Dichlorobenzene	7,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
1,3-Dichlorobenzene +	70	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
1,4-Dichlorobenzene		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
3,3´-Dichlorobenzidine **	1	0.79 U	1.1 U	0.82 U	0.78 U	0.75 U
2,4-Dichlorophenol	230	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Diethyl phthalate	63,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Dimethyl phthalate +	780,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Di-n-butyl phthalate	7,800	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2,4-Dimethylphenol	1,600	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4,6-Dinitro-2-methylphenol		1.9 U	2.6 U	2 U	1.9 U	1.8 U
2,4-Dinitrophenol	160	1.9 U	2.6 U	2 U	1.9 U	1.8 U
2,4-Dinitrotoluene **	0.9	0.2 U	0.28 U	0.21 U	0.2 U	0.19 U
2,6-Dinitrotoluene **	0.9	0.2 U	0.28 U	0.21 U	0.2 U	0.19 U
Di-n-octyl phthalate	1,600	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Hexachlorobenzene **	0.4	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Hexachlorobutadiene +	16	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Hexachlorocyclopentadiene	550	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Hexachloroethane	78	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Isophorone	15,600	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2-Methylnaphthalene +	310	0.39 U	3.8	0.41 U	0.39 U	0.38 U
2-Methylphenol	3,900	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4-Methylphenol +	390	0.39 U	2.2	0.41 U	0.39 U	0.38 U
2-Nitroaniline		1.9 U	2.6 U	2 U	1.9 U	1.8 U
3-Nitroaniline 4-Nitroaniline		1.9 U 1.9 U	2.6 U 2.6 U	2 U 2 U	1.9 U 1.9 U	1.8 U 1.8 U
4-Nitroaniline Nitrobenzene	39	0.2 U	0.28 U	0.21 U	0.2 U	0.19 U
2-Nitrophenol	39	0.2 U 0.39 U	0.28 U 0.54 U	0.21 U 0.41 U	0.2 U 0.39 U	0.19 U 0.38 U
4-Nitrophenol		1.9 U	2.6 U	0.41 U 2 U	0.39 U 1.9 U	1.8 U
N-Nitrosodi-n-propylamine **	0.09	0.2 U	0.28 U	0.21 U	0.2 U	0.19 U
N-Nitrosodi-n-propytamine N-Nitrosodiphenylamine	130	0.2 U	0.28 U	0.21 U	0.2 U	0.19 U
2, 2'-Oxybis(1-Chloropropane)		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Pentachlorophenol **	3	1.9 U	2.6 U	0.41 U	1.9 U	1.8 U
Phenol	47,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
1,2,4-Trichlorobenzene	780	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2,4,5-Trichlorophenol	7,800	0.39 U	1.1 U	0.41 U	0.39 U	0.38 U
2,4,5-Trichlorophenol	58	0.79 U	0.54 U	0.82 U 0.41 U	0.78 U	0.73 U
NOTES:	30	0.39 U	0.34 U	0.41 U	U.39 U	0.50 (

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) **} Values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.

^{(6) +} Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 2 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route Residential Property The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	nd surface)/Conce	ntration
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18
		PAHs	(mg/kg)			
Acenaphthene	4,700	0.03 U	4.3	0.072	0.029 U	0.028 U
Acenaphthylene +	2,300	0.03 U	0.45	0.031 U	0.029 U	0.028 U
Anthracene	23,000	0.03 U	11	0.079	0.029 U	0.028 U
Benzo(a)anthracene	0.9	0.03 U	14	0.065	0.029 U	0.028 U
Benzo(b)fluoranthene	0.9	0.03 U	8.5	0.038	0.029 U	0.028 U
Benzo(k)fluoranthene	9	0.03 U	9.8	0.038	0.029 U	0.028 U
Benzo(g,h,i)perylene +	2,300	0.03 U	3.2	0.031 U	0.029 U	0.028 U
Benzo(a)pyrene	0.09	0.03 U	12	0.059	0.029 U	0.028 U
Chrysene	88	0.037	12	0.061	0.029	0.028 U
Dibenzo(a,h)anthracene	0.09	0.03 U	1.6	0.031 U	0.029 U	0.028 U
Fluoranthene	3,100	0.056	27	0.14	0.029	0.028 U
Fluorene	3,100	0.03 U	6.2	0.088	0.029 U	0.028 U
Indeno(1,2,3-cd)pyrene	0.9	0.03 U	3.8	0.031 U	0.029 U	0.028 U
Naphthalene	1,600	0.054	4	0.39	0.087	0.028 U
Phenanthrene +	2,300	0.11	27	0.24	0.089	0.075
Pyrene	2,300	0.057	23	0.11	0.05	0.028 U
		PCBs	(mg/kg)			
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Total PCBs	1	NA	NA	NA	NA	NA
	Priority	Pollutant Metals	and Total Cyanide	(mg/kg)		
Antimony	31	NA	NA	NA	NA	NA
Arsenic	13.0	NA	NA	NA	NA	NA
Barium	5,500	NA	NA	NA	NA	NA
Beryllium	160	NA	NA	NA	NA	NA
Cadmium	78	NA	NA	NA	NA	NA
Chromium	230	NA	NA	NA	NA	NA
Copper	2,900	NA	NA	NA	NA	NA
Lead	400	NA	NA	NA	NA	NA
Mercury	23	NA	NA	NA	NA	NA
Nickel	1,600	NA	NA	NA	NA	NA
Selenium	390	NA	NA	NA	NA	NA
Silver	390	NA	NA	NA	NA	NA
Thallium	6.3	NA	NA	NA	NA	NA
Zinc	23,000	NA	NA	NA	NA	NA
Total Cyanide	1,600	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- $\ensuremath{\text{(6) PCBs}}\xspace Polychlorinated \ensuremath{\text{Biphenyls}}\xspace.$
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 3 Tier 1 Screening: Soil Ingestion Exposure Route Construction Worker The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	A		th (feet below grou		
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3
		TCL Volat	iles (mg/kg)			
Acetone	200,000	0.099	0.041 U	0.17	0.091	0.051
Benzene	2,300	0.0097 U	0.0082 U	0.055	0.015	0.0072 U
Bromodichloromethane	2,000	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Bromoform	16,000	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Bromomethane	1,000	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
2-Butanone		0.019 U	0.016 U	0.024 U	0.02	0.014 U
Carbon Disulfide	20,000	0.0097 U	0.0082 U	0.023	0.0081 U	0.0072 U
Carbon Tetrachloride	410	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chlorobenzene	4,100	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chloroethane +	82,000	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
Chloroform	2,000	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chloromethane +	820	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Dibromochloromethane	41,000	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1-Dichloroethane	200,000	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,2-Dichloroethane	1,400	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1-Dichloroethene	1,800	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
cis-1,2-Dichloroethene	20,000	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
trans-1,2-Dichloroethene	41,000	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,2-Dichloropropane	1,800	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
cis-1,3-Dichloropropene	1,200	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
trans-1,3-Dichloropropene	1,200	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Ethylbenzene	20,000	0.0097 U	0.0082 U	0.044	0.049	0.0072 U
2-Hexanone +	8,200	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
4-Methyl-2-Pentanone		0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
Methylene Chloride	12,000	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA
Styrene	41,000	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1,2,2-Tetrachloroethane +	12,000	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Tetrachloroethene	2,400	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Toluene	410,000	0.0097 U	0.0082 U	0.036	0.0081 U	0.0072 U
1,1,1-Trichloroethane		0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1,2-Trichloroethane	8,200	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Trichloroethene	1,200	0.0097 U	0.0082 U	0.021	0.0081 U	0.0072 U
Vinyl Chloride	170	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
m,p-Xylene*	410,000	0.0097 U	0.0082 U	0.028	0.0081 U	0.0072 U
o-Xylene*	410,000	0.0097 U	0.0082 U	0.025	0.012	0.0096
Xylenes, Total	410,000	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration								
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001		
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3		
Compound/Analyte	Level (Ilig/kg)		atiles (mg/kg)	2-3	3-4	2-3		
Bis(2-chloroethoxy)methane		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Bis(2-chloroethyl)ether	75	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Bis(2-ethylhexyl)phthalate	4.100	0.37 U	0.45	0.37 U	0.38 U	0.49		
4-Bromophenyl phenyl ether		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Butyl benzyl phthalate	410.000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Carbazole	6,200	0.37 U	0.38 U	0.52	0.47	2.9		
4-Chloro-3-methylphenol +	41,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
4-Chloroaniline	820	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2-Chloronaphthalene		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2-Chlorophenol	10,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
4-Chlorophenyl phenyl ether		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Dibenzofuran +	820	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
1,2-Dichlorobenzene	18,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
1,3-Dichlorobenzene +	180	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
1,4-Dichlorobenzene		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
3,3´-Dichlorobenzidine	280	0.74 U	0.76 U	0.75 U	0.75 U	0.71 U		
2,4-Dichlorophenol	610	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Diethyl phthalate	1,000,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Dimethyl phthalate +	1,000,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Di-n-butyl phthalate	200,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2,4-Dimethylphenol	41,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
4,6-Dinitro-2-methylphenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
2,4-Dinitrophenol	410	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
2,4-Dinitrotoluene	180	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2,6-Dinitrotoluene	180	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Di-n-octyl phthalate	4,100	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Hexachlorobenzene	78	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Hexachlorobutadiene +	41	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Hexachlorocyclopentadiene	14,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Hexachloroethane	2,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Isophorone	410,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2-Methylnaphthalene +	820	0.37 U	0.38 U	0.85	0.38 U	0.57		
2-Methylphenol	100,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
4-Methylphenol +	1,000	0.37 U	0.38 U	0.56	0.38 U	0.36 U		
2-Nitroaniline		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
3-Nitroaniline		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
4-Nitroaniline		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
Nitrobenzene	1,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2-Nitrophenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
4-Nitrophenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
N-Nitrosodi-n-propylamine	18	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
N-Nitrosodiphenylamine	25,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.016 U	0.016 U	0.015 U		
Pentachlorophenol	520	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
Phenol	120,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
1,2,4-Trichlorobenzene	2,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2,4,5-Trichlorophenol	200,000	0.74 U	0.76 U	0.75 U	0.75 U	0.71 U		
2,4,6-Trichlorophenol NOTES:	11,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample l	Location and Dept	h (feet below grou	nd surface)/Conce	ntration
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3
		PAHs ((mg/kg)			
Acenaphthene	120,000	0.037	0.029 U	0.45	0.19	0.69
Acenaphthylene +	61,000	0.032	0.029 U	1.2	0.13	0.32
Anthracene	610,000	0.27	0.16	1.5	0.3	0.75
Benzo(a)anthracene	170	0.34	0.34	3.5	0.43	2.5
Benzo(b)fluoranthene	170	0.44	0.32	2.2	0.36	1.8
Benzo(k)fluoranthene	1,700	0.44	0.26	2.7	0.39	1.6
Benzo(g,h,i)perylene +	61,000	0.31	0.23	2	0.48	0.94
Benzo(a)pyrene	17	0.32	0.21	3.1	0.52	2.3
Chrysene	17,000	0.71	0.67	4.1	0.62	2.5
Dibenzo(a,h)anthracene	17	0.16	0.099	0.81	0.13	0.39
Fluoranthene	82,000	1.4	1.1	6.2	0.85	4.1
Fluorene	82,000	0.067	0.029 U	0.63	0.21	0.65
Indeno(1,2,3-cd)pyrene	170	0.31	0.2	2	0.35	0.93
Naphthalene	4,100	0.36	0.044	0.84	0.28	0.75
Phenanthrene +	61,000	0.64	0.35	3.8	1	3.7
Pyrene	61,000	1.5	1.2	8.6	1.1	4.5
		PCBs (mg/kg)			
Aroclor 1016		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1221		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1232		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1242		0.09 U	0.093 U	0.094	0.09 U	0.4
Aroclor 1248		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1254		0.18 U	0.19 U	0.18 U	0.18 U	0.33
Aroclor 1260		0.18 U	0.19 U	0.18 U	0.18 U	0.16 U
Total PCBs	1	0.810 U	0.845 U	0.814	0.810 U	1.226
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony	82	0.97 UJ	1 UJ	1 UJ	1 UJ	1.1 UJ
Arsenic	61	8.1	9.2 J	6.5	2.5 J	7.2
Barium	14,000	61 J	47 J	82 J	19 J	68 J
Beryllium	410	0.75	0.87	1.1	0.63	1
Cadmium	200	0.91	0.54	0.79	0.52 U	1.1
Chromium	4,100	14 J	20 J	15 J	6.9 J	20 J
Copper	8,200	66 J	32 J	43 J	8.9 J	110 J
Lead	400	380 J	41	130 J	31	150 J
Mercury	61	0.35	0.28	0.15	0.035	0.076
Nickel	4,100	17 J	33 J	20 J	5.5 J	23 J
Selenium	1,000	0.97 U	1 U	1 U	1 U	1.1 U
Silver	1,000	0.97 U	1 U	1 U	1 U	1.1 U
Thallium	160	0.97 U	4.2	1	1 U	1.1 U
Zinc	61,000	160 J	70 J	90 J	23 J	290 J
Total Cyanide	4,100	0.31 U	0.27 U	0.26 U	0.26 U	0.23 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- $(9)\ Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001
Compound/Analyte	Level (mg/kg)	4-5	5-7	2-3	9-10	2-3
		TCL Volat	iles (mg/kg)			
Acetone	200,000	0.32	0.061 U	0.067	0.061	0.073
Benzene	2,300	0.017 U	0.012 U	0.015	0.012 U	0.079
Bromodichloromethane	2,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Bromoform	16,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Bromomethane	1,000	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
2-Butanone		0.072	0.025 U	0.024 U	0.023 U	0.025 U
Carbon Disulfide	20,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Carbon Tetrachloride	410	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chlorobenzene	4,100	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chloroethane +	82,000	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Chloroform	2,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chloromethane +	820	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Dibromochloromethane	41,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1-Dichloroethane	200,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,2-Dichloroethane	1,400	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1-Dichloroethene	1,800	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
cis-1,2-Dichloroethene	20,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
trans-1,2-Dichloroethene	41,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,2-Dichloropropane	1,800	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
cis-1,3-Dichloropropene	1,200	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
trans-1,3-Dichloropropene	1,200	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Ethylbenzene	20,000	0.017 U	0.012 U	0.012 U	0.012 U	0.15
2-Hexanone +	8,200	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
4-Methyl-2-Pentanone		0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Methylene Chloride	12,000	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA
Styrene	41,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1,2,2-Tetrachloroethane +	12,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Tetrachloroethene	2,400	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Toluene	410,000	0.017 U	0.012 U	0.012 U	0.012 U	0.041
1,1,1-Trichloroethane		0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1,2-Trichloroethane	8,200	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Trichloroethene	1,200	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Vinyl Chloride	170	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
m,p-Xylene*	410,000	0.017 U	0.012 U	0.012 U	0.012 U	0.11
o-Xylene*	410,000	0.017 U	0.012 U	0.012 U	0.012 U	0.12
Xylenes, Total	410,000	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	- I					
	Tier 1			h (feet below grou		
	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001
Compound/Analyte	Level (mg/kg)	4-5	5-7	2-3	9-10	2-3
	п		atiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Bis(2-chloroethyl)ether	75	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Bis(2-ethylhexyl)phthalate	4,100	0.44 U	1.1	0.38 U	0.39 U	0.38 U
4-Bromophenyl phenyl ether		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Butyl benzyl phthalate	410,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Carbazole	6,200	0.44 U	0.41 U	0.67	0.39 U	2.2
4-Chloro-3-methylphenol +	41,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4-Chloroaniline	820	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Chloronaphthalene		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Chlorophenol	10,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4-Chlorophenyl phenyl ether		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Dibenzofuran +	820	0.44 U	0.41 U	0.38 U	0.39 U	0.4
1,2-Dichlorobenzene	18,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
1,3-Dichlorobenzene +	180	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
1,4-Dichlorobenzene		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
3,3´-Dichlorobenzidine	280	0.89 U	0.82 U	0.76 U	0.78 U	0.76 U
2,4-Dichlorophenol	610	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Diethyl phthalate	1,000,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Dimethyl phthalate +	1,000,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Di-n-butyl phthalate	200,000	0.44 U	0.45	0.38 U	0.39 U	0.38 U
2,4-Dimethylphenol	41,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4,6-Dinitro-2-methylphenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
2,4-Dinitrophenol	410	2.1 U	2 U	1.8 U	1.9 U	1.8 U
2,4-Dinitrotoluene	180	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2,6-Dinitrotoluene	180	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Di-n-octyl phthalate	4,100	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachlorobenzene	78	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachlorobutadiene +	41	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachlorocyclopentadiene	14,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachloroethane	2,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Isophorone	410,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Methylnaphthalene +	820	0.44 U	0.41 U	0.54	0.39 U	2.7
2-Methylphenol	100,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4-Methylphenol +	1,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Nitroaniline		2.1 U	2 U	1.8 U	1.9 U	1.8 U
3-Nitroaniline		2.1 U	2 U	1.8 U	1.9 U	1.8 U
4-Nitroaniline		2.1 U	2 U	1.8 U	1.9 U	1.8 U
Nitrobenzene	1,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Nitrophenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
4-Nitrophenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
N-Nitrosodi-n-propylamine	18	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
N-Nitrosodiphenylamine	25,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2, 2'-Oxybis(1-Chloropropane)		0.019 U	0.017 U	0.016 U	0.017 U	0.016 U
Pentachlorophenol	520	2.1 U	2 U	1.8 U	1.9 U	1.8 U
Phenol	120,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
1,2,4-Trichlorobenzene	2,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2,4,5-Trichlorophenol	200,000	0.89 U	0.82 U	0.76 U	0.78 U	0.76 U
2,4,6-Trichlorophenol NOTES:	11,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample 1	Location and Dept	h (feet below groui	nd surface)/Concer	ntration
	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001
Compound/Analyte	Level (mg/kg)	4-5	5-7	2-3	9-10	2-3
		PAHs (mg/kg)			
Acenaphthene	120,000	0.034 U	0.17	0.84	0.03 U	1.4
Acenaphthylene +	61,000	0.034 U	0.13	1.3	0.03 U	0.59
Anthracene	610,000	0.034 U	0.7	1.1	0.03 U	1.7
Benzo(a)anthracene	170	0.034 U	0.78	3	0.03 U	3.3
Benzo(b)fluoranthene	170	0.034 U	1.1	1.9	0.03 U	2
Benzo(k)fluoranthene	1,700	0.034 U	0.91	2.5	0.03 U	2.4
Benzo(g,h,i)perylene +	61,000	0.034 U	1.2	1.2	0.03 U	1.4
Benzo(a)pyrene	17	0.034 U	0.75	3.3	0.03 U	3.3
Chrysene	17,000	0.034 U	1.7	3.5	0.03 U	4.2
Dibenzo(a,h)anthracene	17	0.034 U	0.41	0.55	0.03 U	0.71
Fluoranthene	82,000	0.034 U	2.4	4.3	0.03 U	7.2
Fluorene	82,000	0.034 U	0.31	0.77	0.03 U	1.5
Indeno(1,2,3-cd)pyrene	170	0.034 U	0.74	1.3	0.03 U	1.6
Naphthalene	4,100	0.034 U	0.15	0.22	0.03 U	4.2
Phenanthrene +	61,000	0.034 U	1.5	2.9	0.03 U	7
Pyrene	61,000	0.034 U	3.4	6.6	0.03 U	6.1
		PCBs (U U/		T	
Aroclor 1016		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U
Aroclor 1221		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U
Aroclor 1232		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U
Aroclor 1242		0.1 U	5.8	0.092 U	0.095 U	0.29
Aroclor 1248		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U
Aroclor 1254		0.2 U	3.4	0.19 U	0.19 U	0.29
Aroclor 1260		0.2 U	0.19 U	0.19 U	0.19 U	0.18 U
Total PCBs	1	0.900 U	9.774	0.840 U	0.855 U	1.128
		Pollutant Metals a				
Antimony	82	1.2 UJ	1.4 J	1.1 UJ	1.1 UJ	1.1 UJ
Arsenic	61	3.6 J	8.1 J	9	5.8 J	7.3
Barium	14,000	58 J	260 J	78 J	18 J	160 J
Beryllium	410	1.3	0.72	1.1	0.97	0.95
Cadmium	200	0.6 U	3 570 Y	1.1	0.55 U	1.2
Chromium	4,100	20 J	570 J	14 J	15 J	13 J
Copper	8,200	18 J	220 J	140 J	19 J	35 J
Lead	400	17	280	160 J	13	450 J
Mercury	61	0.031 U	0.31	0.32	0.027 U	0.22
Nickel	4,100	24 J	76 J	20 J	23 J	17 J
Selenium	1,000	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U
Silver	1,000	1.2 U	1.3	1.1 U	1.1 U	1.1 U
Thallium	160	1.2	1.2 U	1.1 U	1.5	1.1 U
Zinc	61,000	63 J	780 J	240 J	37 J	320 J
Total Cyanide NOTES:	4,100	0.31 U	0.33 U	0.27 U	0.31 U	0.25 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) \boldsymbol{J} Indicates an estimated value.
- $(8) + Screening \ level \ obtained \ from \ Table \ B: Soil \ Remediation \ Objectives \ for \ Industrial/Commercial \ Properties, \ Non-TACO \ Chemicals \ (Illinois \ EPA \ 2004).$
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Compound/Analyte Acetone Benzene Bromodichloromethane Bromoform Bromomethane 2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane 1.1-Dichloroethane	Screening Level (mg/kg) 200,000 2,300 2,000 16,000 1,000 20,000 410 4,100 82,000 2,000	0.16 0.78 0.025 U 0.025 U 0.05 U 0.05 U 0.025 U 0.025 U 0.025 U 0.025 U	SP06-003 8-10 iles (mg/kg) 0.092 U 0.056 0.018 U 0.037 U 0.037 U 0.037 U 0.018 U	0.06 U 0.012 U 0.012 U 0.012 U 0.012 U 0.024 U 0.024 U 0.04	9-10 0.068 U 0.014 U 0.014 U 0.014 U 0.014 U 0.027 U 0.027 U	0.046 U 0.0093 U 0.0093 U 0.0093 U 0.0093 U 0.019 U
Acetone Benzene Bromodichloromethane Bromoform Bromomethane 2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane	200,000 2,300 2,000 16,000 1,000 20,000 410 4,100 82,000 2,000	TCL Volati 0.16 0.78 0.025 U 0.025 U 0.05 U 0.05 U 0.025 U 0.025 U 0.025 U	iles (mg/kg) 0.092 U 0.056 0.018 U 0.018 U 0.037 U 0.037 U 0.018 U	0.06 U 0.012 U 0.012 U 0.012 U 0.024 U 0.024 U	0.068 U 0.014 U 0.014 U 0.014 U 0.014 U 0.027 U	0.046 U 0.0093 U 0.0093 U 0.0093 U 0.019 U
Benzene Bromodichloromethane Bromoform Bromomethane 2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane	2,300 2,000 16,000 1,000 20,000 410 4,100 82,000 2,000	0.16 0.78 0.025 U 0.025 U 0.05 U 0.05 U 0.025 U 0.025 U 0.025 U 0.025 U	0.092 U 0.056 0.018 U 0.018 U 0.037 U 0.037 U 0.018 U	0.012 U 0.012 U 0.012 U 0.024 U 0.024 U	0.014 U 0.014 U 0.014 U 0.027 U	0.0093 U 0.0093 U 0.0093 U 0.019 U
Benzene Bromodichloromethane Bromoform Bromomethane 2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane	2,300 2,000 16,000 1,000 20,000 410 4,100 82,000 2,000	0.78 0.025 U 0.025 U 0.05 U 0.05 U 0.025 U 0.025 U 0.025 U 0.025 U	0.056 0.018 U 0.018 U 0.037 U 0.037 U 0.018 U	0.012 U 0.012 U 0.012 U 0.024 U 0.024 U	0.014 U 0.014 U 0.014 U 0.027 U	0.0093 U 0.0093 U 0.0093 U 0.019 U
Bromodichloromethane Bromoform Bromomethane 2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane	2,000 16,000 1,000 20,000 410 4,100 82,000 2,000	0.025 U 0.025 U 0.05 U 0.05 U 0.025 U 0.025 U 0.025 U	0.018 U 0.018 U 0.037 U 0.037 U 0.018 U	0.012 U 0.012 U 0.024 U 0.024 U	0.014 U 0.014 U 0.027 U	0.0093 U 0.0093 U 0.019 U
Bromoform Bromomethane 2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane	16,000 1,000 20,000 410 4,100 82,000 2,000	0.025 U 0.05 U 0.05 U 0.025 U 0.025 U 0.025 U	0.018 U 0.037 U 0.037 U 0.018 U	0.012 U 0.024 U 0.024 U	0.014 U 0.027 U	0.0093 U 0.019 U
Bromomethane 2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane	1,000 20,000 410 4,100 82,000 2,000	0.05 U 0.05 U 0.025 U 0.025 U 0.025 U	0.037 U 0.037 U 0.018 U	0.024 U 0.024 U	0.027 U	0.019 U
2-Butanone Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane	20,000 410 4,100 82,000 2,000	0.05 U 0.025 U 0.025 U 0.025 U	0.037 U 0.018 U	0.024 U		
Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane	20,000 410 4,100 82,000 2,000	0.025 U 0.025 U 0.025 U	0.018 U		0.027 U	
Carbon Tetrachloride Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane	410 4,100 82,000 2,000	0.025 U 0.025 U		0.04		0.019 U
Chlorobenzene Chloroethane + Chloroform Chloromethane + Dibromochloromethane	4,100 82,000 2,000	0.025 U	0.018 U		0.014 U	0.0093 U
Chloroethane + Chloroform Chloromethane + Dibromochloromethane	82,000 2,000			0.012 U	0.014 U	0.0093 U
Chloroform Chloromethane + Dibromochloromethane	2,000	0.05.11	0.018 U	0.012 U	0.014 U	0.0093 U
Chloromethane + Dibromochloromethane		0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Dibromochloromethane	020	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
	820	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1.1-Dichloroethane	41,000	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
	200,000	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,2-Dichloroethane	1,400	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1-Dichloroethene	1,800	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
cis-1,2-Dichloroethene	20,000	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
trans-1,2-Dichloroethene	41,000	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,2-Dichloropropane	1,800	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
cis-1,3-Dichloropropene	1,200	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
trans-1,3-Dichloropropene	1,200	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Ethylbenzene	20,000	3	0.38	0.013	0.014 U	0.0093 U
2-Hexanone +	8,200	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
4-Methyl-2-Pentanone		0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Methylene Chloride	12,000	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA
Styrene	41,000	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1,2,2-Tetrachloroethane +	12,000	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Tetrachloroethene	2,400	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Toluene	410,000	0.79	0.044	0.012	0.014 U	0.0093 U
1,1,1-Trichloroethane		0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1,2-Trichloroethane	8,200	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Trichloroethene	1,200	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Vinyl Chloride	170	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
m,p-Xylene*	410,000	3	0.098	0.016	0.014 U	0.0093 U
o-Xylene*	410,000	2	0.17	0.012 U	0.014 U	0.0093 U
Xylenes, Total	410,000	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	A		h (feet below grou		
	Screening	SP06-002	SP06-003	SP07-001	SP07-002	SP07-003
Compound/Analyte	Level (mg/kg)	3-4	8-10	1-2	9-10	16-17
		TCL Semivol	, , ,			
Bis(2-chloroethoxy)methane		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Bis(2-chloroethyl)ether	75	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Bis(2-ethylhexyl)phthalate	4,100	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4-Bromophenyl phenyl ether		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Butyl benzyl phthalate	410,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Carbazole	6,200	0.39 U	1.4	0.47	0.38 U	0.39 U
4-Chloro-3-methylphenol +	41,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4-Chloroaniline	820	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Chloronaphthalene		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Chlorophenol	10,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4-Chlorophenyl phenyl ether		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Dibenzofuran +	820	1.3	1.6	0.37 U	0.38 U	0.39 U
1,2-Dichlorobenzene	18,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
1,3-Dichlorobenzene +	180	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
1,4-Dichlorobenzene		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
3,3´-Dichlorobenzidine	280	0.78 U	2.2 U	0.74 U	0.76 U	0.79 U
2,4-Dichlorophenol	610	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Diethyl phthalate	1,000,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Dimethyl phthalate +	1,000,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Di-n-butyl phthalate	200,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2,4-Dimethylphenol	41,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4,6-Dinitro-2-methylphenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
2,4-Dinitrophenol	410	1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
2,4-Dinitrotoluene	180	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2,6-Dinitrotoluene	180	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Di-n-octyl phthalate	4,100	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Hexachlorobenzene	78	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Hexachlorobutadiene +	41	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Hexachlorocyclopentadiene	14,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Hexachloroethane	2,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Isophorone	410,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Methylnaphthalene +	820	20	17	0.4	0.38 U	0.39 U
2-Methylphenol	100,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4-Methylphenol +	1,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Nitroaniline		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
3-Nitroaniline		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
4-Nitroaniline		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
Nitrobenzene	1,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Nitrophenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
4-Nitrophenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
N-Nitrosodi-n-propylamine	18	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
N-Nitrosodiphenylamine	25,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.046 U	0.016 U	0.016 U	0.017 U
Pentachlorophenol	520	1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
Phenol	120,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
1,2,4-Trichlorobenzene	2,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2,4,5-Trichlorophenol	200,000	0.78 U	2.2 U	0.74 U	0.76 U	0.79 U
2,4,6-Trichlorophenol	11,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SP06-002	SP06-003	SP07-001	SP07-002	SP07-003		
Compound/Analyte	Level (mg/kg)	3-4	8-10	1-2	9-10	16-17		
		PAHs (mg/kg)					
Acenaphthene	120,000	10	4.5	0.28 U	0.029 U	0.03 U		
Acenaphthylene +	61,000	2	4.2	0.39	0.029 U	0.03 U		
Anthracene	610,000	9.6	4.9	0.54	0.029 U	0.03 U		
Benzo(a)anthracene	170	3.9	4.2	1.5	0.029 U	0.03 U		
Benzo(b)fluoranthene	170	1.1	1.3	1.3	0.029 U	0.03 U		
Benzo(k)fluoranthene	1,700	0.89	1.1	0.98	0.029 U	0.03 U		
Benzo(g,h,i)perylene +	61,000	1.2	0.82 U	0.77	0.029 U	0.03 U		
Benzo(a)pyrene	17	2.7	0.97	1.6	0.029 U	0.03 U		
Chrysene	17,000	5.1	4.3	1.6	0.029 U	0.03 U		
Dibenzo(a,h)anthracene	17	0.52	0.82 U	0.28 U	0.029 U	0.03 U		
Fluoranthene	82,000	9.1	6.8	2.5	0.029 U	0.03 U		
Fluorene	82,000	10	6.5	0.28 U	0.029 U	0.03 U		
Indeno(1,2,3-cd)pyrene	170	1.2	0.82 U	0.71	0.029 U	0.03 U		
Naphthalene	4,100	27	13	0.28	0.029 U	0.03 U		
Phenanthrene +	61,000	34	21	2.1	0.029 U	0.03 U		
Pyrene	61,000	15	10	2.8	0.029 U	0.03 U		
		PCBs (1	mg/kg)					
Aroclor 1016		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U		
Aroclor 1221		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U		
Aroclor 1232		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U		
Aroclor 1242		0.094 U	0.09 U	1.5	0.09 U	0.096 U		
Aroclor 1248		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U		
Aroclor 1254		0.19 U	0.18 U	0.91 U	0.18 U	0.19 U		
Aroclor 1260		0.19 U	0.18 U	0.18 U	0.18 U	0.19 U		
Total PCBs	1	0.850 U	0.810 U	2.954	0.810 U	0.860 U		
		Pollutant Metals a	nd Total Cyanide	(mg/kg)				
Antimony	82	1.1 UJ	NA	1 UJ	1.1 UJ	1.1 UJ		
Arsenic	61	6.5 J	NA	4.4	7.7 J	8.1 J		
Barium	14,000	67 J	NA	370 J	38 J	98 J		
Beryllium	410	1	NA	5.7	0.98	1.2		
Cadmium	200	0.98	NA	1.4	0.54 U	0.57 U		
Chromium	4,100	12 J	NA	120 J	17 J	21 J		
Copper	8,200	71 J	NA	400 J	28 J	24 J		
Lead	400	190	NA	180 J	55	16		
Mercury	61	0.15	NA	0.091	0.029 U	0.032 U		
Nickel	4,100	17 J	NA	17 J	33 J	31 J		
Selenium	1,000	1.1 U	NA	2.8	1.1 U	1.1 U		
Silver	1,000	1.1 U	NA	1 U	1.1 U	1.1 U		
Thallium	160	1.1 U	NA	1 U	1.4	2.1		
Zinc	61,000	190 J	NA	180 J	69 J	39 J		
Total Cyanide	4,100	0.26 U	NA	0.26 U	0.27 U	0.29 U		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) J Indicates an estimated value.
- (8) NA Not analyzed.
- $(9) + Screening \ level \ obtained \ from \ Table \ B: Soil \ Remediation \ Objectives \ for \ Industrial/Commercial \ Properties, \ Non-TACO \ Chemicals \ (Illinois \ EPA \ 2004).$
- (10) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	nd surface)/Conce	ntration
	Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002
Compound/Analyte	Level (mg/kg)	0-0.5	7-8	3-5	1-2	6-7
		TCL Volat	iles (mg/kg)			
Acetone	200,000	0.047 U	0.097	0.12	0.062	0.071 U
Benzene	2,300	0.0095 U	0.011 U	0.19	0.0092	3.6
Bromodichloromethane	2,000	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Bromoform	16,000	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Bromomethane	1,000	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
2-Butanone		0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Carbon Disulfide	20,000	0.0095 U	0.011 U	0.013	0.0074 U	0.014 U
Carbon Tetrachloride	410	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chlorobenzene	4,100	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chloroethane +	82,000	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Chloroform	2,000	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chloromethane +	820	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Dibromochloromethane	41,000	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1-Dichloroethane	200,000	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,2-Dichloroethane	1,400	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1-Dichloroethene	1,800	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
cis-1,2-Dichloroethene	20,000	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
trans-1,2-Dichloroethene	41,000	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,2-Dichloropropane	1,800	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
cis-1,3-Dichloropropene	1,200	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
trans-1,3-Dichloropropene	1,200	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Ethylbenzene	20,000	0.0095 U	0.011 U	0.07	0.014	8.2
2-Hexanone +	8,200	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
4-Methyl-2-Pentanone		0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Methylene Chloride	12,000	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA
Styrene	41,000	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1,2,2-Tetrachloroethane +	12,000	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Tetrachloroethene	2,400	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Toluene	410,000	0.0095 U	0.011 U	0.011 U	0.0087	0.014 U
1,1,1-Trichloroethane		0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1,2-Trichloroethane	8,200	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Trichloroethene	1,200	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Vinyl Chloride	170	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
m,p-Xylene*	410,000	0.0095 U	0.011 U	0.013	0.021	5
o-Xylene*	410,000	0.0095 U	0.011 U	0.087	0.014	1.4
Xylenes, Total	410,000	NA	NA	NA	NA	NA

- NOTES:
 (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Tier 1 Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002	
Compound/Analyte	Level (mg/kg)	0-0.5	7-8	3-5	1-2	5P10-002 6-7	
Compound/Analyte	Level (IIIg/Kg)		atiles (mg/kg)	5-5	1-2	U- /	
Bis(2-chloroethoxy)methane	I I	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Bis(2-chloroethyl)ether	75	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Bis(2-ethylhexyl)phthalate	4,100	2.9	0.4 U	0.75	2.1	0.39 U	
4-Bromophenyl phenyl ether		0.41 U	0.4 U	0.75 0.37 U	0.36 U	0.39 U	
Butyl benzyl phthalate	410.000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Carbazole	6.200	0.41 U	0.4 U	3.7	1.1	0.39 U	
4-Chloro-3-methylphenol +	41,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
4-Chloroaniline	820	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2-Chloronaphthalene		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2-Chlorophenol	10.000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
4-Chlorophenyl phenyl ether		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Dibenzofuran +	820	0.41 U	0.4 U	0.65	2	1.2	
1.2-Dichlorobenzene	18.000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
1,3-Dichlorobenzene +	180	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
1,4-Dichlorobenzene		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
3,3´-Dichlorobenzidine	280	0.81 U	0.8 U	0.75 U	0.72 U	0.77 U	
2,4-Dichlorophenol	610	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Diethyl phthalate	1,000,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Dimethyl phthalate +	1,000,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Di-n-butyl phthalate	200,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2,4-Dimethylphenol	41,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U	
2,4-Dinitrophenol	410	2 U	1.9 U	1.8 U	1.8 U	1.9 U	
2,4-Dinitrotoluene	180	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2,6-Dinitrotoluene	180	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Di-n-octyl phthalate	4,100	0.71	0.4 U	0.37 U	0.36 U	0.39 U	
Hexachlorobenzene	78	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Hexachlorobutadiene +	41	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Hexachlorocyclopentadiene	14,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Hexachloroethane	2,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Isophorone	410,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2-Methylnaphthalene +	820	0.41 U	0.4 U	0.37 U	27	23	
2-Methylphenol	100,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
4-Methylphenol +	1,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2-Nitroaniline		2 U	1.9 U	1.8 U	1.8 U	1.9 U	
3-Nitroaniline		2 U	1.9 U	1.8 U	1.8 U	1.9 U	
4-Nitroaniline		2 U	1.9 U	1.8 U	1.8 U	1.9 U	
Nitrobenzene	1,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2-Nitrophenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U	
4-Nitrophenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U	
N-Nitrosodi-n-propylamine	18	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
N-Nitrosodiphenylamine	25,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.017 U	0.016 U	0.015 U	0.016 U	
Pentachlorophenol	520	2 U	1.9 U	1.8 U	1.8 U	1.9 U	
Phenol	120,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
1,2,4-Trichlorobenzene	2,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2,4,5-Trichlorophenol	200,000	0.81 U	0.8 U	0.75 U	0.72 U	0.77 U	
2,4,6-Trichlorophenol NOTES:	11,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample l	Sample Location and Depth (feet below ground surface)/Concentration					
	Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002		
Compound/Analyte	Level (mg/kg)	0-0.5	7-8	3-5	1-2	6-7		
		PAHs (mg/kg)					
Acenaphthene	120,000	0.031 U	0.003 U	0.51	2.4	8.6		
Acenaphthylene +	61,000	0.28	0.0052	0.36	1.9	5.1		
Anthracene	610,000	0.4	0.011	2.3	7.1	8.6		
Benzo(a)anthracene	170	1.4	0.029	3.3	1.6	1.7		
Benzo(b)fluoranthene	170	1.2	0.035	2.3	3.5	2.5		
Benzo(k)fluoranthene	1,700	0.9	0.027	2.3	3.4	1.7		
Benzo(g,h,i)perylene +	61,000	0.9	0.015	0.74	3.6	1.6		
Benzo(a)pyrene	17	1.7	0.031	1.6	3.9	2.2		
Chrysene	17,000	1.5	0.035	3.8	9	11		
Dibenzo(a,h)anthracene	17	0.33	0.006	0.31	1.2	0.59		
Fluoranthene	82,000	1.7	0.043	5.3	11	6.8		
Fluorene	82,000	0.078	0.0052	0.92	6.9	6.7		
Indeno(1,2,3-cd)pyrene	170	0.83	0.014	0.69	2.6	1.1		
Naphthalene	4,100	0.041	0.004	0.52	10	18		
Phenanthrene +	61,000	1	0.032	5.2	24	26		
Pyrene	61,000	2.1	0.056	5.1	14	14		
		PCBs (mg/kg)					
Aroclor 1016		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U		
Aroclor 1221		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U		
Aroclor 1232		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U		
Aroclor 1242		0.37	0.098 U	0.39	3.9	0.094 U		
Aroclor 1248		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U		
Aroclor 1254		0.28	0.2 U	0.41	3.3	0.19 U		
Aroclor 1260		0.2 U	0.2 U	0.18 U	0.18 U	0.19 U		
Total PCBs	1	1.246	0.890 U	1.332	7.740	0.850 U		
		Pollutant Metals a	and Total Cyanide	(mg/kg)				
Antimony	82	1.2 UJ	1.1 UJ	1 UJ	1.1 J	1.1 UJ		
Arsenic	61	7.2	2.8 J	7.8 J	7.2	13 J		
Barium	14,000	76 J	31 J	140 J	140 J	80 J		
Beryllium	410	1.1	1.1	0.6	0.84	1.1		
Cadmium	200	0.75	0.54 U	1.1	1.9	0.55 U		
Chromium	4,100	15 J	18 J	98 J	26 J	18 J		
Copper	8,200	50 J	22 J	68 J	120 J	32 J		
Lead	400	200 J	18	340	260 J	25		
Mercury	61	1.4	0.033	0.21	0.3	0.027 U		
Nickel	4,100	19 J	24 J	38 J	25 J	35 J		
Selenium	1,000	1.2 U	1.1 U	1 U	0.9 U	1.1 U		
Silver	1,000	1.2 U	1.1 U	1 U	0.9 U	1.1 U		
Thallium	160	1.2 U	1.5	1 U	1.3	2		
Zinc	61,000	170 J	42 J	240 J	830 J	53 J		
Total Cyanide	4,100	0.33 U	0.3 U	0.29 U	0.36	0.31 U		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- $(9)\ Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SP10-003	SP11-001	SP11-002	SP13-001	SP13-002
Compound/Analyte	Level (mg/kg)	13-14	0-0.5	9-10	1-2	6-7
	·	TCL Volat	iles (mg/kg)			
Acetone	200,000	0.053 U	0.057 U	0.078	0.062	0.12
Benzene	2,300	0.92	0.011 U	0.013 U	0.012 U	0.012 U
Bromodichloromethane	2,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Bromoform	16,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Bromomethane	1,000	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
2-Butanone		0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Carbon Disulfide	20,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Carbon Tetrachloride	410	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Chlorobenzene	4,100	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Chloroethane +	82,000	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Chloroform	2,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Chloromethane +	820	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Dibromochloromethane	41,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1-Dichloroethane	200,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,2-Dichloroethane	1,400	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1-Dichloroethene	1,800	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
cis-1,2-Dichloroethene	20,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
trans-1,2-Dichloroethene	41,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,2-Dichloropropane	1,800	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
cis-1,3-Dichloropropene	1,200	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
trans-1,3-Dichloropropene	1,200	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Ethylbenzene	20,000	9	0.011 U	0.013 U	0.012 U	0.012 U
2-Hexanone +	8,200	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
4-Methyl-2-Pentanone		0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Methylene Chloride	12,000	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA
Styrene	41,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1,2,2-Tetrachloroethane +	12,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Tetrachloroethene	2,400	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Toluene	410,000	0.6	0.011 U	0.013 U	0.012 U	0.012 U
1,1,1-Trichloroethane		0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1,2-Trichloroethane	8,200	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Trichloroethene	1,200	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Vinyl Chloride	170	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
m,p-Xylene*	410,000	3.8	0.011 U	0.013 U	0.012 U	0.012 U
o-Xylene*	410,000	12	0.011 U	0.013 U	0.012 U	0.012 U
Xylenes, Total	410,000	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Cample 1	Location and Dant	h (feet below grou	nd surface)/Conse	ntration
	Screening	SP10-003	SP11-001	SP11-002	SP13-001	SP13-002
Compound/Analyte	Level (mg/kg)	13-14	0-0.5	9-10	1-2	5P13-002 6-7
Compound/Analyte	Level (Ilig/kg)		atiles (mg/kg)	9-10	1-2	0-7
Bis(2-chloroethoxy)methane	I	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Bis(2-chloroethyl)ether	75	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Bis(2-ethylhexyl)phthalate	4.100	0.38 U	1.1	0.38 U	0.36 U	0.4 U
4-Bromophenyl phenyl ether		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Butyl benzyl phthalate	410.000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Carbazole	6,200	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
4-Chloro-3-methylphenol +	41.000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
4-Chloroaniline	820	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2-Chloronaphthalene		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2-Chlorophenol	10.000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
4-Chlorophenyl phenyl ether		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Dibenzofuran +	820	0.75	0.38 U	0.38 U	0.36 U	0.4 U
1,2-Dichlorobenzene	18,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
1,3-Dichlorobenzene +	180	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
1,4-Dichlorobenzene		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
3,3´-Dichlorobenzidine	280	0.77 U	0.76 U	0.77 U	0.73 U	0.8 U
2,4-Dichlorophenol	610	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Diethyl phthalate	1,000,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Dimethyl phthalate +	1,000,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Di-n-butyl phthalate	200,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2,4-Dimethylphenol	41,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
4,6-Dinitro-2-methylphenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
2,4-Dinitrophenol	410	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
2,4-Dinitrotoluene	180	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2,6-Dinitrotoluene	180	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Di-n-octyl phthalate	4,100	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Hexachlorobenzene	78	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Hexachlorobutadiene +	41	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Hexachlorocyclopentadiene	14,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Hexachloroethane	2,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Isophorone	410,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2-Methylnaphthalene +	820	20	1.1	0.42	0.86	0.53
2-Methylphenol	100,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
4-Methylphenol +	1,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2-Nitroaniline		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
3-Nitroaniline		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
4-Nitroaniline		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
Nitrobenzene	1,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2-Nitrophenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
4-Nitrophenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
N-Nitrosodi-n-propylamine	18	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
N-Nitrosodiphenylamine	25,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.016 U	0.015 U	0.017 U
Pentachlorophenol	520	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
Phenol	120,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
1,2,4-Trichlorobenzene	2,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2,4,5-Trichlorophenol	200,000	0.77 U	0.76 U	0.77 U	0.73 U	0.8 U
2,4,6-Trichlorophenol NOTES:	11,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 3 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	nd surface)/Concentration					
	Screening	SP10-003	SP11-001	SP11-002	SP13-001	SP13-002
Compound/Analyte	Level (mg/kg)	13-14	0-0.5	9-10	1-2	6-7
		PAHs (mg/kg)			
Acenaphthene	120,000	5.5	1.1	0.046	0.16	0.056
Acenaphthylene +	61,000	3.7	0.86	0.029 U	0.069	0.03 U
Anthracene	610,000	3.1	2.5	0.029 U	0.13	0.03 U
Benzo(a)anthracene	170	0.37	0.9	0.029 U	0.037	0.03 U
Benzo(b)fluoranthene	170	0.42	1.7	0.029 U	0.13	0.03 U
Benzo(k)fluoranthene	1,700	0.49	1.6	0.029 U	0.11	0.03 U
Benzo(g,h,i)perylene +	61,000	0.51	0.62	0.029 U	0.2	0.03 U
Benzo(a)pyrene	17	0.45	1.8	0.029 U	0.094	0.03 U
Chrysene	17,000	2.2	3.1	0.032	0.26	0.03 U
Dibenzo(a,h)anthracene	17	0.13	0.3	0.029 U	0.084	0.03 U
Fluoranthene	82,000	1.8	3.7	0.037	0.21	0.03 U
Fluorene	82,000	3.8	1.3	0.029 U	0.15	0.03 U
Indeno(1,2,3-cd)pyrene	170	0.26	0.44	0.029 U	0.14	0.03 U
Naphthalene	4,100	27	1.5	0.73	0.83	0.99
Phenanthrene +	61,000	9.3	6.5	0.092	0.34	0.04
Pyrene	61,000	3	7.8	0.063	0.28	0.03 U
		PCBs (0 0			
Aroclor 1016		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1221		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1232		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1242		0.09 U	0.49	0.094 U	0.98	0.097 U
Aroclor 1248		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1254		0.18 U	0.45	0.19 U	0.9 U	0.19 U
Aroclor 1260		0.18 U	0.18 U	0.19 U	0.18 U	0.19 U
Total PCBs	1	0.810 U	1.488	0.850 U	2.420	0.865 U
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony	82	1.1 UJ	1.1 UJ	1.1 UJ	1 J	1.1 UJ
Arsenic	61	7.5 J	5.4	11 J	7.3	9.4 J
Barium	14,000	83 J	120 J	100 J	86 J	86 J
Beryllium	410	1.1	1.1	1.1	0.79	1.2
Cadmium	200	0.55 U	1.2	0.56 U	0.7	0.57 U
Chromium	4,100	19 J	16 J	20 J	14 J	20 J
Copper	8,200	31 J	90 J	32 J	40 J	34 J
Lead	400	18	140 J	19	250 J	20
Mercury	61	0.028	0.1	0.028 U	2.9	0.03
Nickel	4,100	39 J	26 J	37 J	19 J	34 J
Selenium	1,000	1.1 U	1.1 U	1.1 U	1 U	1.1 U
Silver	1,000	1.1 U	1.1 U	1.1 U	1 U	1.1 U
Thallium	160	2.5	1.5	2	1.5	2
Zinc	61,000	49 J	220 J	47 J	94 J	45 J
Total Cyanide	4,100	0.25 U	0.89	0.27 U	0.26 U	0.3 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) \boldsymbol{J} Indicates an estimated value.
- $(8) + Screening \ level \ obtained \ from \ Table \ B: Soil \ Remediation \ Objectives \ for \ Industrial/Commercial \ Properties, \ Non-TACO \ Chemicals \ (Illinois \ EPA \ 2004).$
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	Screening	SP13-003	SB14-001	SB14-002	SB15-001	SB15-002
Compound/Analyte	Level (mg/kg)	15-16	1-2	6-8	0-0.5	6-8
		TCL Volat	iles (mg/kg)			
Acetone	200,000	0.055 U	0.051 U	0.078	0.037 U	0.051 U
Benzene	2,300	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromodichloromethane	2,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromoform	16,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromomethane	1,000	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
2-Butanone		0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Carbon Disulfide	20,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.018
Carbon Tetrachloride	410	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chlorobenzene	4,100	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chloroethane +	82,000	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Chloroform	2,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chloromethane +	820	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Dibromochloromethane	41,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1-Dichloroethane	200,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,2-Dichloroethane	1,400	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1-Dichloroethene	1,800	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
cis-1,2-Dichloroethene	20,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
trans-1,2-Dichloroethene	41,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,2-Dichloropropane	1,800	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
cis-1,3-Dichloropropene	1,200	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
trans-1,3-Dichloropropene	1,200	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Ethylbenzene	20,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
2-Hexanone +	8,200	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
4-Methyl-2-Pentanone		0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Methylene Chloride	12,000	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA
Styrene	41,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,2,2-Tetrachloroethane +	12,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Tetrachloroethene	2,400	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Toluene	410,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,1-Trichloroethane		0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,2-Trichloroethane	8,200	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Trichloroethene	1,200	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Vinyl Chloride	170	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
m,p-Xylene*	410,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
o-Xylene*	410,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Xylenes, Total	410,000	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	nd surface)/Conce	ntration
	Screening	SP13-003	SB14-001	SB14-002	SB15-001	SB15-002
Compound/Analyte	Level (mg/kg)	15-16	1-2	6-8	0-0.5	6-8
		TCL Semivo	latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Bis(2-chloroethyl)ether	75	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Bis(2-ethylhexyl)phthalate	4,100	0.39 U	0.49	0.42 U	0.58	0.39 U
4-Bromophenyl phenyl ether		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Butyl benzyl phthalate	410,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Carbazole	6,200	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
4-Chloro-3-methylphenol +	41,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
4-Chloroaniline	820	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2-Chloronaphthalene		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2-Chlorophenol	10,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
4-Chlorophenyl phenyl ether		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Dibenzofuran +	820	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
1,2-Dichlorobenzene	18,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
1,3-Dichlorobenzene +	180	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
1,4-Dichlorobenzene		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
3,3'-Dichlorobenzidine	280	0.78 U	0.71 U	0.84 U	0.81 U	0.78 U
2,4-Dichlorophenol	610	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Diethyl phthalate	1,000,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Dimethyl phthalate +	1,000,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Di-n-butyl phthalate	200,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2,4-Dimethylphenol	41,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
4,6-Dinitro-2-methylphenol		1.9 U	1.7 U	2 U	2 U	1.9 U
2,4-Dinitrophenol	410	1.9 U	1.7 U	2 U	2 U	1.9 U
2,4-Dinitrotoluene	180	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2,6-Dinitrotoluene	180	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Di-n-octyl phthalate	4,100	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Hexachlorobenzene	78	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Hexachlorobutadiene +	41	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Hexachlorocyclopentadiene	14,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Hexachloroethane	2,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Isophorone	410,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2-Methylnaphthalene +	820	0.79	0.35 U	0.42 U	0.4 U	0.39 U
2-Methylphenol	100,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
4-Methylphenol +	1,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2-Nitroaniline		1.9 U	1.7 U	2 U	2 U	1.9 U
3-Nitroaniline		1.9 U	1.7 U	2 U	2 U	1.9 U
4-Nitroaniline		1.9 U	1.7 U	2 U	2 U	1.9 U
Nitrobenzene	1,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2-Nitrophenol		1.9 U	1.7 U	2 U	2 U	1.9 U
4-Nitrophenol		1.9 U	1.7 U	2 U	2 U	1.9 U
N-Nitrosodi-n-propylamine	18	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
N-Nitrosodiphenylamine	25,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.015 U	0.018 U	0.017 U	0.017 U
Pentachlorophenol	520	1.9 U	1.7 U	2 U	2 U	1.9 U
Phenol	120,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
1,2,4-Trichlorobenzene	2,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2,4,5-Trichlorophenol	200,000	0.78 U	0.71 U	0.84 U	0.81 U	0.78 U
2,4,6-Trichlorophenol	11,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration								
	Tier 1							
G 1/A 1 :	Screening	SP13-003	SB14-001	SB14-002	SB15-001	SB15-002		
Compound/Analyte	Level (mg/kg)	15-16	1-2	6-8	0-0.5	6-8		
	<u> </u>		(mg/kg)					
Acenaphthene	120,000	0.077	0.15	0.032 U	0.031 U	0.03 U		
Acenaphthylene +	61,000	0.03 U	0.18	0.032 U	0.13	0.03 U		
Anthracene	610,000	0.03 U	0.25	0.032 U	0.031 U	0.03 U		
Benzo(a)anthracene	170	0.03 U	3.5	0.032 U	0.15	0.03 U		
Benzo(b)fluoranthene	170	0.03 U	1.8	0.032 U	0.13	0.03 U		
Benzo(k)fluoranthene	1,700	0.03 U	1.6	0.032 U	0.13	0.03 U		
Benzo(g,h,i)perylene +	61,000	0.03 U	0.66	0.032 U	0.17	0.03 U		
Benzo(a)pyrene	17	0.03 U	3	0.032 U	0.2	0.03 U		
Chrysene	17,000	0.03 U	3.2	0.032 U	0.21	0.03 U		
Dibenzo(a,h)anthracene	17	0.03 U	0.35	0.032 U	0.057	0.03 U		
Fluoranthene	82,000	0.03 U	4.2	0.035	0.24	0.087		
Fluorene	82,000	0.036	0.15	0.032 U	0.031 U	0.03 U		
Indeno(1,2,3-cd)pyrene	170	0.03 U	0.67	0.032 U	0.14	0.03 U		
Naphthalene	4,100	1.1	0.19	0.11	0.031 U	0.051		
Phenanthrene +	61,000	0.063	0.3	0.071	0.17	0.083		
Pyrene	61,000	0.03 U	11	0.056	0.33	0.13		
		PCBs	(mg/kg)					
Aroclor 1016		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U		
Aroclor 1221		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U		
Aroclor 1232		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U		
Aroclor 1242		0.093 U	0.12	0.1 U	0.22	0.096 U		
Aroclor 1248		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U		
Aroclor 1254		0.19 U	0.17 U	0.2 U	0.2 U	0.19 U		
Aroclor 1260		0.19 U	0.17 U	0.2 U	0.2 U	0.19 U		
Total PCBs	1	0.845 U	0.800	0.900 U	1.004	0.860 U		
	Priority	Pollutant Metals	and Total Cyanide	(0 0)				
Antimony	82	1 UJ	0.98 UJ	1.1 UJ	1 UJ	1.1 UJ		
Arsenic	61	9.6 J	3.3	15 J	9.3	12 J		
Barium	14,000	74 J	32 J	31 J	150 J	26 J		
Beryllium	410	1	0.61	1.2	0.99	1.1		
Cadmium	200	0.66	0.59	0.57 U	2.2	0.57 U		
Chromium	4,100	17 J	12 J	19 J	33 J	16 J		
Copper	8,200	34 J	18 J	32 J	120 J	18 J		
Lead	400	19	85 J	26	340 J	13		
Mercury	61	0.061	0.06	0.031 U	0.23	0.027		
Nickel	4,100	30 J	10 J	43 J	31 J	27 J		
Selenium	1,000	1 U	0.98 U	1.1 U	1 U	1.1 U		
Silver	1,000	1 U	0.98 U	1.1 U	1 U	1.1 U		
Thallium	160	1.9	0.98 U	1.2	1	1.1		
Zinc	61,000	42 J	91 J	47 J	550 J	36 J		
Total Cyanide	4,100	0.26 U	0.28 U	0.32 U	0.32 U	0.27 U		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) \boldsymbol{J} Indicates an estimated value.
- (8) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dept	th (feet below grou	nd surface)/Conce	ntration
	Screening	SB15-003	SP16-001	SP16-002	SP16-003	SB17-001
Compound/Analyte	Level (mg/kg)	10-12	2-3	9-10	15-16	1-2
	<u> </u>	TCL Volat	iles (mg/kg)			
Acetone	200,000	0.1	0.053 U	0.1	0.062 U	0.06 U
Benzene	2,300	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromodichloromethane	2,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromoform	16,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromomethane	1,000	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
2-Butanone		0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Carbon Disulfide	20,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Carbon Tetrachloride	410	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chlorobenzene	4,100	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chloroethane +	82,000	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Chloroform	2,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chloromethane +	820	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Dibromochloromethane	41,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1-Dichloroethane	200,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,2-Dichloroethane	1,400	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1-Dichloroethene	1,800	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
cis-1,2-Dichloroethene	20,000	0.011 U	0.053	0.0098 U	0.012 U	0.012 U
trans-1,2-Dichloroethene	41,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,2-Dichloropropane	1,800	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
cis-1,3-Dichloropropene	1,200	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
trans-1,3-Dichloropropene	1,200	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Ethylbenzene	20,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
2-Hexanone +	8,200	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
4-Methyl-2-Pentanone		0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Methylene Chloride	12,000	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA
Styrene	41,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,2,2-Tetrachloroethane +	12,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Tetrachloroethene	2,400	0.011 U	0.1	0.0098 U	0.012 U	0.012 U
Toluene	410,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,1-Trichloroethane		0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,2-Trichloroethane	8,200	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Trichloroethene	1,200	0.011 U	0.017	0.0098 U	0.012 U	0.012 U
Vinyl Chloride	170	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
m,p-Xylene*	410,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
o-Xylene*	410,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Xylenes, Total	410,000	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1				nd surface)/Conce		
	Screening	SB15-003	SP16-001	SP16-002	SP16-003	SB17-001	
Compound/Analyte	Level (mg/kg)	10-12	2-3	9-10	15-16	1-2	
	П		latiles (mg/kg)	1	1		
Bis(2-chloroethoxy)methane		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Bis(2-chloroethyl)ether	75	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Bis(2-ethylhexyl)phthalate	4,100	0.42 U	1.6	0.39 U	0.39 U	0.94	
4-Bromophenyl phenyl ether		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Butyl benzyl phthalate	410,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Carbazole	6,200	0.42 U	0.75	0.39 U	0.39 U	0.36 U	
4-Chloro-3-methylphenol +	41,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
4-Chloroaniline	820	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2-Chloronaphthalene		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2-Chlorophenol	10,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
4-Chlorophenyl phenyl ether		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Dibenzofuran +	820	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
1,2-Dichlorobenzene	18,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
1,3-Dichlorobenzene +	180	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
1,4-Dichlorobenzene		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
3,3´-Dichlorobenzidine	280	0.85 U	0.73 U	0.77 U	0.77 U	0.73 U	
2,4-Dichlorophenol	610	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Diethyl phthalate	1,000,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Dimethyl phthalate +	1,000,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Di-n-butyl phthalate	200,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2,4-Dimethylphenol	41,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
4,6-Dinitro-2-methylphenol		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U	
2,4-Dinitrophenol	410	2.1 U	1.8 U	1.9 U	1.9 U	1.8 U	
2,4-Dinitrotoluene	180	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2,6-Dinitrotoluene	180	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Di-n-octyl phthalate	4,100	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Hexachlorobenzene	78	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Hexachlorobutadiene +	41	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Hexachlorocyclopentadiene	14,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Hexachloroethane	2,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Isophorone	410,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2-Methylnaphthalene +	820	0.42 U	0.64	0.39 U	0.39 U	0.36 U	
2-Methylphenol	100,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
4-Methylphenol +	1,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2-Nitroaniline		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U	
3-Nitroaniline		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U	
4-Nitroaniline		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U	
Nitrobenzene	1,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2-Nitrophenol		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U	
4-Nitrophenol		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U	
N-Nitrosodi-n-propylamine	18	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
N-Nitrosodiphenylamine	25,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2, 2'-Oxybis(1-Chloropropane)		0.018 U	0.015 U	0.016 U	0.016 U	0.015 U	
Pentachlorophenol	520	2.1 U	1.8 U	1.9 U	1.9 U	1.8 U	
Phenol	120,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
1,2,4-Trichlorobenzene	2,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2,4,5-Trichlorophenol	200,000	0.85 U	0.73 U	0.77 U	0.77 U	0.73 U	
2,4,6-Trichlorophenol	11,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB15-003	SP16-001	SP16-002	SP16-003	SB17-001		
Compound/Analyte	Level (mg/kg)	10-12	2-3	9-10	15-16	1-2		
			(mg/kg)	-				
Acenaphthene	120,000	0.032 U	0.5	0.029 U	0.029 U	0.036		
Acenaphthylene +	61,000	0.032 U	0.15	0.029 U	0.029 U	0.049		
Anthracene	610,000	0.032 U	0.81	0.029 U	0.029 U	0.21		
Benzo(a)anthracene	170	0.032 U	0.36	0.029 U	0.029 U	0.089		
Benzo(b)fluoranthene	170	0.032 U	0.92	0.029 U	0.029 U	0.15		
Benzo(k)fluoranthene	1,700	0.032 U	1.1	0.029 U	0.029 U	0.12		
Benzo(g,h,i)perylene +	61,000	0.032 U	0.81	0.029 U	0.029 U	0.034		
Benzo(a)pyrene	17	0.032 U	0.75	0.029 U	0.029 U	0.069		
Chrysene	17,000	0.032 U	2.3	0.029 U	0.029 U	0.087		
Dibenzo(a,h)anthracene	17	0.032 U	0.28	0.029 U	0.029 U	0.028 U		
Fluoranthene	82,000	0.032 U	1.8	0.029 U	0.029 U	0.12		
Fluorene	82,000	0.032 U	0.44	0.029 U	0.029 U	0.046		
Indeno(1,2,3-cd)pyrene	170	0.032 U	0.54	0.029 U	0.029 U	0.034		
Naphthalene	4,100	0.032 U	0.64	0.029 U	0.029 U	0.051		
Phenanthrene +	61,000	0.032 U	2.2	0.029 U	0.029 U	0.21		
Pyrene	61,000	0.032 U	2.7	0.029 U	0.029 U	0.18		
		PCBs ((mg/kg)					
Aroclor 1016		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U		
Aroclor 1221		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U		
Aroclor 1232		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U		
Aroclor 1242		0.1 U	4.7	0.094 U	0.095 U	0.15		
Aroclor 1248		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U		
Aroclor 1254		0.21 U	4.3	0.19 U	0.19 U	0.18 U		
Aroclor 1260		0.21 U	0.18 U	0.19 U	0.19 U	0.18 U		
Total PCBs	1	0.920 U	9.532	0.850 U	0.855 U	0.862		
			and Total Cyanide					
Antimony	82	1.1 UJ	1.1 J	1 UJ	1.1 UJ	1 UJ		
Arsenic	61	5 J	6.7	12 J	9.6 J	1.4		
Barium	14,000	22 J	130 J	79 J	84 J	9.4 J		
Beryllium	410	1.2	1.3	1.1	1.1	0.54		
Cadmium	200	0.57 U	2.3	0.52 U	0.56 U	0.5 U		
Chromium	4,100	19 J	47 J	17 J	17 J	5.3 J		
Copper	8,200	31 J	170 J	39 J	28 J	4.9 J		
Lead	400	16	150 J	21	17	7.3 J		
Mercury	61	0.032 U	0.43	0.027 U	0.033	0.04		
Nickel	4,100	30 J	40 J	37 J	24 J	3.3 J		
Selenium	1,000	1.1 U	1 U	1 U	1.1 U	1 U		
Silver	1,000	1.1 U	1 U	1 U	1.1 U	1 U		
Thallium	160	2.5	1.4	1.8	1.7	1 U		
Zinc	61,000	42 J	600 J	40 J	33 J	55 J		
Total Cyanide	4,100	0.28 U	0.26 U	0.25 U	0.28 U	0.28 U		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) J Indicates an estimated value.
- $(8) + Screening \ level \ obtained \ from \ Table \ B: Soil \ Remediation \ Objectives \ for \ Industrial/Commercial \ Properties, \ Non-TACO \ Chemicals \ (Illinois \ EPA \ 2004).$
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	ind surface)/Conce	Sample Location and Depth (feet below ground surface)/Concentration					
	Screening	SB18B-001	SB19-001	SB20-001	SB21-001	SB22-002					
Compound/Analyte	Level (mg/kg)	1-2	1-2	0-0.5	1-2	8-10					
	1 (2 8/	TCL Volat	iles (mg/kg)								
Acetone	200,000	0.062 U	0.05	0.12	0.036	0.065					
Benzene	2,300	0.012 U	0.039	0.0084 U	0.077	0.0089 U					
Bromodichloromethane	2,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
Bromoform	16,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
Bromomethane	1,000	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U					
2-Butanone		0.025 U	0.016 U	0.017 U	0.013 U	0.018 U					
Carbon Disulfide	20,000	0.012 U	0.0081 U	0.011	0.0065 U	0.0089 U					
Carbon Tetrachloride	410	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
Chlorobenzene	4,100	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
Chloroethane +	82,000	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U					
Chloroform	2,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
Chloromethane +	820	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
Dibromochloromethane	41,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
1,1-Dichloroethane	200,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
1,2-Dichloroethane	1,400	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
1,1-Dichloroethene	1,800	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
cis-1,2-Dichloroethene	20,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
trans-1,2-Dichloroethene	41,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
1,2-Dichloropropane	1,800	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
cis-1,3-Dichloropropene	1,200	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
trans-1,3-Dichloropropene	1,200	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
Ethylbenzene	20,000	0.012 U	0.22	0.014	0.12	0.0089 U					
2-Hexanone +	8,200	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U					
4-Methyl-2-Pentanone		0.025 U	0.016 U	0.017 U	0.013 U	0.018 U					
Methylene Chloride	12,000	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U					
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA					
Styrene	41,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
1,1,2,2-Tetrachloroethane +	12,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
Tetrachloroethene	2,400	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
Toluene	410,000	0.012 U	0.064	0.0097	0.018	0.0089 U					
1,1,1-Trichloroethane		0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
1,1,2-Trichloroethane	8,200	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
Trichloroethene	1,200	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U					
Vinyl Chloride	170	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U					
m,p-Xylene*	410,000	0.012 U	0.2	0.031	0.034	0.0089 U					
o-Xylene*	410,000	0.012 U	0.12	0.011	0.036	0.0089 U					
Xylenes, Total	410,000	NA	NA	NA	NA	NA					

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration								
	Tier 1	A		·				
	Screening	SB18B-001	SB19-001	SB20-001	SB21-001	SB22-002		
Compound/Analyte	Level (mg/kg)	1-2	1-2	0-0.5	1-2	8-10		
	11 11		atiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Bis(2-chloroethyl)ether	75	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Bis(2-ethylhexyl)phthalate	4,100	1.2	0.63	2.7	0.59 J	0.39 U		
4-Bromophenyl phenyl ether		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Butyl benzyl phthalate	410,000	0.35 U	0.36 U	0.58	0.38 U	0.39 U		
Carbazole	6,200	0.35 U	3.2	0.53	0.91 J	0.39 U		
4-Chloro-3-methylphenol +	41,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
4-Chloroaniline	820	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2-Chloronaphthalene		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2-Chlorophenol	10,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
4-Chlorophenyl phenyl ether		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Dibenzofuran +	820	0.35 U	0.94	0.38 U	0.9 J	0.39 U		
1,2-Dichlorobenzene	18,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
1,3-Dichlorobenzene +	180	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
1,4-Dichlorobenzene		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
3,3´-Dichlorobenzidine	280	0.7 U	0.72 U	0.75 U	0.75 U	0.78 U		
2,4-Dichlorophenol	610	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Diethyl phthalate	1,000,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Dimethyl phthalate +	1,000,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Di-n-butyl phthalate	200,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2,4-Dimethylphenol	41,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
4,6-Dinitro-2-methylphenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
2,4-Dinitrophenol	410	1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
2,4-Dinitrotoluene	180	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2,6-Dinitrotoluene	180	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Di-n-octyl phthalate	4,100	1.6	0.36 U	0.38 U	0.38 U	0.39 U		
Hexachlorobenzene	78	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Hexachlorobutadiene +	41	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Hexachlorocyclopentadiene	14,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Hexachloroethane	2,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Isophorone	410,000 820	0.35 U 0.47	0.36 U 20	0.38 U 0.59	0.38 U 2.3 J	0.39 U 0.39 U		
2-Methylnaphthalene + 2-Methylphenol	100.000	0.47 0.35 U	0.36 U	0.39 U	0.38 U	0.39 U		
4-Methylphenol +	1,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2-Nitroaniline	1,000	1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
3-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
4-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
Nitrobenzene	1,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2-Nitrophenol	1,000	1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
4-Nitrophenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
N-Nitrosodi-n-propylamine	18	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
N-Nitrosodiphenylamine	25.000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2, 2'-Oxybis(1-Chloropropane)	23,000	0.015 U	0.015 U	0.016 U	0.38 U	0.39 U		
Pentachlorophenol	520	1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
Phenol	120,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
1,2,4-Trichlorobenzene	2,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2,4,5-Trichlorophenol	200,000	0.33 U	0.30 U	0.38 U	0.38 U	0.39 U		
2,4,6-Trichlorophenol	11,000	0.7 U	0.72 U	0.73 U	0.73 U	0.78 U		
NOTES:	11,000	0.55 0	0.50 0	0.56 U	0.56 U	0.37 0		

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽⁵⁾ J - Indicates an estimated value.

^{(6) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁷⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB18B-001	SB19-001	SB20-001	SB21-001	SB22-002			
Compound/Analyte	Level (mg/kg)	1-2	1-2	0-0.5	1-2	8-10			
•	<u> </u>	PAHs ((mg/kg)						
Acenaphthene	120,000	0.19	3.1	0.31	3.3 J	0.031			
Acenaphthylene +	61,000	0.12	2.3	0.19	2.5 J	0.029 U			
Anthracene	610,000	0.67	3.1	0.78	5 J	0.047			
Benzo(a)anthracene	170	0.31	1.4	0.26	1.6 J	0.029 U			
Benzo(b)fluoranthene	170	0.57	3.4	2	3.1 J	0.029 U			
Benzo(k)fluoranthene	1,700	0.6	3	1.9	3.5 J	0.029 U			
Benzo(g,h,i)perylene +	61,000	0.8	3	0.89	3.7 J	0.029 U			
Benzo(a)pyrene	17	0.41	2.7	0.67	4 J	0.029 U			
Chrysene	17,000	1.7	5.4	1.4	5.6 J	0.04			
Dibenzo(a,h)anthracene	17	0.25	1.3	0.3	1.1 J	0.029 U			
Fluoranthene	82,000	1.2	7.4	2.4	8.1 J	0.029 U			
Fluorene	82,000	0.3	3.2	0.31	3.6 J	0.033			
Indeno(1,2,3-cd)pyrene	170	0.52	2.5	0.62	2.5 J	0.029 U			
Naphthalene	4,100	0.42	13	0.47	2.4 J	0.2			
Phenanthrene +	61,000	1.9	9.7	2.5	13 J	0.13			
Pyrene	61,000	1.8	8.9	1.9	14 J	0.029 U			
		PCBs ((mg/kg)						
Aroclor 1016		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U			
Aroclor 1221		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U			
Aroclor 1232		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U			
Aroclor 1242		1.9	0.55	1.3	0.1	0.094 U			
Aroclor 1248		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U			
Aroclor 1254		1.6	0.52	0.91 U	0.18 U	0.19 U			
Aroclor 1260		0.17 U	0.17 U	0.18 U	0.18 U	0.19 U			
Total PCBs	1	4.010	1.588	2.754	0.824	0.850 U			
		Pollutant Metals a							
Antimony	82	1 J	0.98 J	1 J	0.97 UJ	1.1 UJ			
Arsenic	61	4	2.5	4.3	6.9	5.7 J			
Barium	14,000	99 J	69 J	150 J	76 J	34 J			
Beryllium	410	0.79	0.5	0.87	0.48 U	0.57 U			
Cadmium	200	1.1	0.44	1.3	0.89	0.57 U			
Chromium	4,100	12 J	9.2 J	15 J	15 J	18 J			
Copper	8,200	67 J	33 J	37 J	48 J	26 J			
Lead	400	130 J	46 J	94 J	120 J	22			
Mercury	61	0.2	0.1	0.53	0.33	0.029			
Nickel	4,100	11 J	12 J	14 J	22 J	31 J			
Selenium	1,000	0.93 U	0.82 U	1 U	0.97 U	1.1 U			
Silver	1,000	0.93 U	0.82 U	1 U	0.97 U	1.1 U			
Thallium	160	1.2	1.1	1.5	0.97 U	1.2			
Zinc	61,000	240 J	98 J	210 J	150 J	46 J			
Total Cyanide	4,100	0.26 U	0.25 U	0.32 U	0.3 U	0.3 U			

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) J Indicates an estimated value.
- $(8) + Screening \ level \ obtained \ from \ Table \ B: Soil \ Remediation \ Objectives \ for \ Industrial/Commercial \ Properties, \ Non-TACO \ Chemicals \ (Illinois \ EPA \ 2004).$
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration					
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003	
Compound/Analyte	Level (mg/kg)	1-2	1-2	1-2	3-5	12-14	
		TCL Volat	iles (mg/kg)				
Acetone	200,000	0.056 U	0.056 U	0.12	0.11	0.058 U	
Benzene	2,300	0.011 U	0.011 U	1.5	0.22	0.012 U	
Bromodichloromethane	2,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
Bromoform	16,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
Bromomethane	1,000	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U	
2-Butanone		0.022 U	0.022 U	0.026	0.034 U	0.023 U	
Carbon Disulfide	20,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
Carbon Tetrachloride	410	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
Chlorobenzene	4,100	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
Chloroethane +	82,000	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U	
Chloroform	2,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
Chloromethane +	820	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
Dibromochloromethane	41,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
1,1-Dichloroethane	200,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
1,2-Dichloroethane	1,400	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
1,1-Dichloroethene	1,800	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
cis-1,2-Dichloroethene	20,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
trans-1,2-Dichloroethene	41,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
1,2-Dichloropropane	1,800	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
cis-1,3-Dichloropropene	1,200	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
trans-1,3-Dichloropropene	1,200	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
Ethylbenzene	20,000	0.011 U	0.016	2.8	4.6	0.012 U	
2-Hexanone +	8,200	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U	
4-Methyl-2-Pentanone		0.022 U	0.022 U	0.018 U	0.034 U	0.023 U	
Methylene Chloride	12,000	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U	
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA	
Styrene	41,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
1,1,2,2-Tetrachloroethane +	12,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
Tetrachloroethene	2,400	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
Toluene	410,000	0.011 U	0.011 U	0.03	0.54	0.012 U	
1,1,1-Trichloroethane		0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
1,1,2-Trichloroethane	8,200	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
Trichloroethene	1,200	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U	
Vinyl Chloride	170	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U	
m,p-Xylene*	410,000	0.011 U	0.011 U	0.068	6.7	0.012 U	
o-Xylene*	410,000	0.011 U	0.011 U	0.72	6.8	0.012 U	
Xylenes, Total	410,000	NA	NA	NA	NA	NA	

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration								
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003		
Compound/Analyte	Level (mg/kg)	1-2	3B24-001 1-2	1-2	3-5	12-14		
Compound/Analyte	Level (Ilig/kg)	TCL Semivol	J.	1-2	3-3	12-14		
Bis(2-chloroethoxy)methane		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Bis(2-chloroethyl)ether	75	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Bis(2-ethylhexyl)phthalate	4.100	2.1	1.7 U	0.36 U	1.2	0.42		
4-Bromophenyl phenyl ether		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Butyl benzyl phthalate	410,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Carbazole	6,200	1.8 U	4.1	1.9	5.7	0.4 U		
4-Chloro-3-methylphenol +	41.000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
4-Chloroaniline	820	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2-Chloronaphthalene		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2-Chlorophenol	10,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
4-Chlorophenyl phenyl ether		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Dibenzofuran +	820	1.8 U	1.7 U	0.84	4.7	0.4 U		
1,2-Dichlorobenzene	18,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
1,3-Dichlorobenzene +	180	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
1,4-Dichlorobenzene		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
3,3´-Dichlorobenzidine	280	3.7 U	3.5 U	0.72 U	0.81 U	0.8 U		
2,4-Dichlorophenol	610	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Diethyl phthalate	1,000,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Dimethyl phthalate +	1,000,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Di-n-butyl phthalate	200,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2,4-Dimethylphenol	41,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
4,6-Dinitro-2-methylphenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U		
2,4-Dinitrophenol	410	8.9 U	8.4 U	1.7 U	2 U	1.9 U		
2,4-Dinitrotoluene	180	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2,6-Dinitrotoluene	180	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Di-n-octyl phthalate	4,100	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Hexachlorobenzene	78	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Hexachlorobutadiene +	41	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Hexachlorocyclopentadiene	14,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Hexachloroethane	2,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Isophorone	410,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2-Methylnaphthalene +	820	1.8 U	1.7 U	4.1	58	0.4		
2-Methylphenol	100,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
4-Methylphenol +	1,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2-Nitroaniline		8.9 U	8.4 U	1.7 U	2 U	1.9 U		
3-Nitroaniline		8.9 U	8.4 U	1.7 U	2 U	1.9 U		
4-Nitroaniline		8.9 U	8.4 U	1.7 U	2 U	1.9 U		
Nitrobenzene	1,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2-Nitrophenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U		
4-Nitrophenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U		
N-Nitrosodi-n-propylamine	18	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
N-Nitrosodiphenylamine	25,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2, 2'-Oxybis(1-Chloropropane)		0.078 U	0.073 U	0.015 U	0.017 U	0.017 U		
Pentachlorophenol	520	8.9 U	8.4 U	1.7 U	2 U	1.9 U		
Phenol	120,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
1,2,4-Trichlorobenzene	2,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2,4,5-Trichlorophenol	200,000	3.7 U	3.5 U	0.72 U	0.81 U	0.8 U		
2,4,6-Trichlorophenol NOTES:	11,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 3 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003			
Compound/Analyte	Level (mg/kg)	1-2	1-2	1-2	3-5	12-14			
•		PAHs ((mg/kg)			·			
Acenaphthene	120,000	2.1	0.63	8.3	19	0.03 U			
Acenaphthylene +	61,000	5	0.34	6.1	8.9	0.03 U			
Anthracene	610,000	4.1	2.1	8.1	16	0.03 U			
Benzo(a)anthracene	170	5.9	0.29	8	14	0.03 U			
Benzo(b)fluoranthene	170	3.1	1.5	4	7	0.03 U			
Benzo(k)fluoranthene	1,700	3.2	1.3	3.3	7	0.03 U			
Benzo(g,h,i)perylene +	61,000	1.6	1.5	2.3	3.7	0.03 U			
Benzo(a)pyrene	17	5	1.7	5.1	9.2	0.03 U			
Chrysene	17,000	6.6	3.6	9.1	15	0.03 U			
Dibenzo(a,h)anthracene	17	1.4 U	0.72	0.84	0.94	0.03 U			
Fluoranthene	82,000	9.4	6.4	16	20	0.03 U			
Fluorene	82,000	2.4	0.67	7	26	0.067			
Indeno(1,2,3-cd)pyrene	170	1.4 U	1.4	2.1	3.1 U	0.03 U			
Naphthalene	4,100	1.8	0.65	6.7	28	0.6			
Phenanthrene +	61,000	10	5.4	30	62	0.15			
Pyrene	61,000	14	7	24	32	0.03 U			
		PCBs ((mg/kg)						
Aroclor 1016		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U			
Aroclor 1221		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U			
Aroclor 1232		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U			
Aroclor 1242		0.95	1.1	0.086 U	0.098 U	0.096 U			
Aroclor 1248		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U			
Aroclor 1254		0.72	0.9	0.17 U	0.2 U	0.19 U			
Aroclor 1260		0.18 U	0.17 U	0.17 U	0.2 U	0.19 U			
Total PCBs	1	2.206	2.518	0.770 U	0.890 U	0.860 U			
			and Total Cyanide						
Antimony	82	1.1 J	1.1 J	1.1 UJ	1.1 UJ	1.1 UJ			
Arsenic	61	5	2.5	3.2	7.8 J	11 J			
Barium	14,000	98 J	110 J	130 J	92 J	110 J			
Beryllium	410	0.76	0.62	0.76	1.3	1.2			
Cadmium	200	0.88	1.2	0.59	0.56 U	0.57 U			
Chromium	4,100	10 J	13 J	7.8 J	17 J	18 J			
Copper	8,200	41 J	60 J	18 J	25 J	26 J			
Lead	400	140 J	150 J	61 J	58	17			
Mercury	61	0.21	0.2	0.17	0.35	0.03 U			
Nickel	4,100	13 J	12 J	6.9 J	29 J	28 J			
Selenium	1,000	0.99 U	0.96 U	1.1 U	1.1 U	1.1 U			
Silver	1,000	0.99 U	0.96 U	1.1 U	1.1 U	1.1 U			
Thallium	160	1.4	1.3	1.4	1.8	1.9			
Zinc	61,000	120 J	270 J	73 J	58 J	41 J			
Total Cyanide	4,100	0.28 U	0.22 U	0.27 U	0.26 U	0.31 U			

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) J Indicates an estimated value.
- $(8) + Screening \ level \ obtained \ from \ Table \ B: Soil \ Remediation \ Objectives \ for \ Industrial/Commercial \ Properties, \ Non-TACO \ Chemicals \ (Illinois \ EPA \ 2004).$
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			th (feet below grou	nd surface)/Conce	entration
	Screening	SB27-001	SB27-002	SB28-001	SB28-002	SB29-001
Compound/Analyte	Level (mg/kg)	5-7	10-12	2-3	5-7	3-5
		TCL Volat	iles (mg/kg)			
Acetone	200,000	0.046	0.035 U	0.093	0.048	0.055 U
Benzene	2,300	0.0084 U	0.0069 U	0.041	0.0076 U	0.011 U
Bromodichloromethane	2,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Bromoform	16,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Bromomethane	1,000	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
2-Butanone		0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Carbon Disulfide	20,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Carbon Tetrachloride	410	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chlorobenzene	4,100	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chloroethane +	82,000	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Chloroform	2,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chloromethane +	820	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Dibromochloromethane	41,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1-Dichloroethane	200,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,2-Dichloroethane	1,400	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1-Dichloroethene	1,800	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
cis-1,2-Dichloroethene	20,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
trans-1,2-Dichloroethene	41,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,2-Dichloropropane	1,800	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
cis-1,3-Dichloropropene	1,200	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
trans-1,3-Dichloropropene	1,200	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Ethylbenzene	20,000	0.0084 U	0.0069 U	0.059	0.0076 U	0.011 U
2-Hexanone +	8,200	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
4-Methyl-2-Pentanone		0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Methylene Chloride	12,000	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA
Styrene	41,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,2,2-Tetrachloroethane +	12,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Tetrachloroethene	2,400	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Toluene	410,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,1-Trichloroethane		0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,2-Trichloroethane	8,200	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Trichloroethene	1,200	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Vinyl Chloride	170	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
m,p-Xylene*	410,000	0.0084 U	0.0069 U	0.012	0.0076 U	0.011 U
o-Xylene*	410,000	0.0084 U	0.0069 U	0.015	0.0076 U	0.011 U
Xylenes, Total	410,000	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB27-001	SB27-002	SB28-001	SB28-002	SB29-001	
Compound/Analyte	Level (mg/kg)	5-7	10-12	2-3	5-7	3-5	
Compound 1 mary to	He ver (mg/ng)		atiles (mg/kg)	20			
Bis(2-chloroethoxy)methane		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Bis(2-chloroethyl)ether	75	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Bis(2-ethylhexyl)phthalate	4,100	0.38 U	0.38 U	0.45	0.4 U	0.39 U	
4-Bromophenyl phenyl ether		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Butyl benzyl phthalate	410,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Carbazole	6,200	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
4-Chloro-3-methylphenol +	41,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
4-Chloroaniline	820	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
2-Chloronaphthalene		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
2-Chlorophenol	10,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
4-Chlorophenyl phenyl ether		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Dibenzofuran +	820	0.38 U	0.38 U	0.5	0.4 U	0.39 U	
1,2-Dichlorobenzene	18,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
1,3-Dichlorobenzene +	180	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
1,4-Dichlorobenzene		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
3,3´-Dichlorobenzidine	280	0.76 U	0.76 U	0.78 U	0.79 U	0.78 U	
2,4-Dichlorophenol	610	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Diethyl phthalate	1,000,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Dimethyl phthalate +	1,000,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Di-n-butyl phthalate	200,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
2,4-Dimethylphenol	41,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
4,6-Dinitro-2-methylphenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	
2,4-Dinitrophenol	410	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	
2,4-Dinitrotoluene	180	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
2,6-Dinitrotoluene	180	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Di-n-octyl phthalate	4,100	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Hexachlorobenzene	78	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Hexachlorobutadiene +	41	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Hexachlorocyclopentadiene	14,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Hexachloroethane	2,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Isophorone	410,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
2-Methylnaphthalene +	820	0.38 U	0.38 U	1.1	0.4 U	0.39 U	
2-Methylphenol	100,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
4-Methylphenol +	1,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
2-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	
3-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	
4-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	
Nitrobenzene	1,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
2-Nitrophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	
4-Nitrophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	
N-Nitrosodi-n-propylamine	18	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
N-Nitrosodiphenylamine	25,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
2, 2'-Oxybis(1-Chloropropane)		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
Pentachlorophenol	520	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	
Phenol	120,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
1,2,4-Trichlorobenzene	2,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	
2,4,5-Trichlorophenol	200,000	0.76 U	0.76 U	0.78 U	0.79 U	0.78 U	
2,4,6-Trichlorophenol NOTES:	11,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U	

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 3 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB27-001	SB27-002	SB28-001	SB28-002	SB29-001		
Compound/Analyte	Level (mg/kg)	5-7	10-12	2-3	5-7	3-5		
Compounds maryte	zever (mg/ng/		(mg/kg)					
Acenaphthene	120,000	0.029 U	0.029 U	1.7	0.03 U	0.035		
Acenaphthylene +	61,000	0.029 U	0.029 U	1.4	0.03 U	0.029 U		
Anthracene	610,000	0.029 U	0.029 U	3.5	0.03 U	0.038		
Benzo(a)anthracene	170	0.029 U	0.029 U	1.1	0.03 U	0.029 U		
Benzo(b)fluoranthene	170	0.029 U	0.029 U	1.8	0.03 U	0.029 U		
Benzo(k)fluoranthene	1,700	0.029 U	0.029 U	1.9	0.03 U	0.029 U		
Benzo(g,h,i)perylene +	61,000	0.029 U	0.029 U	3	0.03 U	0.029 U		
Benzo(a)pyrene	17	0.029 U	0.029 U	2.6	0.03 U	0.029 U		
Chrysene	17,000	0.029 U	0.029 U	3.8	0.03 U	0.052		
Dibenzo(a,h)anthracene	17	0.029 U	0.029 U	0.89	0.03 U	0.029 U		
Fluoranthene	82,000	0.029 U	0.029 U	0.051	0.03 U	0.029		
Fluorene	82,000	0.029 U	0.029 U	1.1	0.03 U	0.033		
Indeno(1,2,3-cd)pyrene	170	0.029 U	0.029 U	1.9	0.03 U	0.029 U		
Naphthalene	4,100	0.029 U	0.029 U	1.4	0.03 U	0.094		
Phenanthrene +	61,000	0.031	0.047	0.038	0.03 U	0.14		
Pyrene	61,000	0.029 U	0.029 U	0.097	0.03 U	0.044		
		PCBs (mg/kg)					
Aroclor 1016		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U		
Aroclor 1221		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U		
Aroclor 1232		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U		
Aroclor 1242		0.094 U	0.093 U	0.34	0.14	0.094 U		
Aroclor 1248		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U		
Aroclor 1254		0.19 U	0.19 U	0.2	0.19 U	0.19 U		
Aroclor 1260		0.19 U	0.19 U	0.19 U	0.19 U	0.19 U		
Total PCBs	1	0.850 U	0.845 U	1.102	0.904	0.850 U		
		Pollutant Metals a	-	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
Antimony	82	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ		
Arsenic	61	7.1 J	7 J	6.1	9.2 J	11 J		
Barium	14,000	32 J	39 J	67 J	41 J	41 J		
Beryllium	410	0.53 U	0.55 U	0.55 U	0.57 U	0.57 U		
Cadmium	200	0.53 U	0.55 U	0.71	0.57 U	0.57 U		
Chromium	4,100	16 J	17 J	14 J	18 J	18 J		
Copper	8,200	39 J	29 J	42 J	27 J	30 J		
Lead	400	20	19	120 J	31	23		
Mercury	61	0.028 U	0.028 U	0.53	0.049	0.031		
Nickel	4,100	31 J	30 J	20 J	33 J	38 J		
Selenium	1,000	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U		
Silver	1,000	12	1.1 U	1.1 U	1.1 U	1.1 U		
Thallium	160	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U		
Zinc	61,000	50 J	42 J	150 J	61 J	46 J		
Total Cyanide	4,100	0.28 U	0.27 U	0.29 U	0.3 U	0.28 U		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) J Indicates an estimated value.
- $(8) + Screening\ level\ obtained\ from\ Table\ B:\ Soil\ Remediation\ Objectives\ for\ Industrial/Commercial\ Properties,\ Non-TACO\ Chemicals\ (Illinois\ EPA\ 2004).$
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dep	th (feet below grou	nd surface)/Conce	
	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002
Compound/Analyte	Level (mg/kg)	12-14	2-3	6-8	2-3	3-5
	·	TCL Volat	iles (mg/kg)			
Acetone	200,000	0.067 U	0.03	0.064 U	0.067 U	0.081 U
Benzene	2,300	0.013 U	0.024	0.013 U	5.2	0.77
Bromodichloromethane	2,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Bromoform	16,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Bromomethane	1,000	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
2-Butanone		0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Carbon Disulfide	20,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Carbon Tetrachloride	410	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chlorobenzene	4,100	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chloroethane +	82,000	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Chloroform	2,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chloromethane +	820	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Dibromochloromethane	41,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1-Dichloroethane	200,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,2-Dichloroethane	1,400	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1-Dichloroethene	1,800	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
cis-1,2-Dichloroethene	20,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
trans-1,2-Dichloroethene	41,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,2-Dichloropropane	1,800	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
cis-1,3-Dichloropropene	1,200	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
trans-1,3-Dichloropropene	1,200	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Ethylbenzene	20,000	0.013 U	0.038	0.013 U	1.5	2
2-Hexanone +	8,200	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
4-Methyl-2-Pentanone		0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Methylene Chloride	12,000	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA
Styrene	41,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1,2,2-Tetrachloroethane +	12,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Tetrachloroethene	2,400	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Toluene	410,000	0.013 U	0.032	0.013 U	0.77	0.016 U
1,1,1-Trichloroethane		0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1,2-Trichloroethane	8,200	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Trichloroethene	1,200	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Vinyl Chloride	170	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
m,p-Xylene*	410,000	0.013 U	0.047	0.013 U	0.62	0.057
o-Xylene*	410,000	0.013 U	0.029	0.013 U	0.47	0.034
Xylenes, Total	410,000	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou		
	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002
Compound/Analyte	Level (mg/kg)	12-14	2-3	6-8	2-3	3-5
			atiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Bis(2-chloroethyl)ether	75	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Bis(2-ethylhexyl)phthalate	4,100	0.39 U	0.33 U	0.37 U	0.99	0.87
4-Bromophenyl phenyl ether		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Butyl benzyl phthalate	410,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Carbazole	6,200	0.39 U	0.33 U	0.37 U	0.46	1.3
4-Chloro-3-methylphenol +	41,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
4-Chloroaniline	820	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Chloronaphthalene		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Chlorophenol	10,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
4-Chlorophenyl phenyl ether		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Dibenzofuran +	820	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
1,2-Dichlorobenzene	18,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
1,3-Dichlorobenzene +	180	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
1,4-Dichlorobenzene		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
3,3´-Dichlorobenzidine	280	0.78 U	0.33 U	0.74 U	0.66 U	0.78 U
2,4-Dichlorophenol	610	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Diethyl phthalate	1,000,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Dimethyl phthalate +	1,000,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Di-n-butyl phthalate	200,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2,4-Dimethylphenol	41,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
4,6-Dinitro-2-methylphenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
2,4-Dinitrophenol	410	1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
2,4-Dinitrotoluene	180	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2,6-Dinitrotoluene	180	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Di-n-octyl phthalate	4,100	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Hexachlorobenzene	78	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Hexachlorobutadiene +	41	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Hexachlorocyclopentadiene	14,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Hexachloroethane	2,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Isophorone	410,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Methylnaphthalene +	820	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Methylphenol	100,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
4-Methylphenol +	1,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Nitroaniline		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
3-Nitroaniline		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
4-Nitroaniline		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
Nitrobenzene	1,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Nitrophenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
4-Nitrophenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
N-Nitrosodi-n-propylamine	18	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
N-Nitrosodiphenylamine	25,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.39 U	0.33 U	0.016 U	0.014 U	0.017 U
Pentachlorophenol	520	1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
Phenol	120,000	0.39 U	15	0.37 U	0.33 U	0.39 U
1,2,4-Trichlorobenzene	2,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2,4,5-Trichlorophenol	200,000	0.78 U	0.66 U	0.74 U	0.66 U	0.78 U
2,4,6-Trichlorophenol	11,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002		
Compound/Analyte	Level (mg/kg)	12-14	2-3	5B31-002 6-8	2-3	3-5		
Compound/Analyte	Level (mg/kg)		(mg/kg)	0-0	2-3	3-3		
Acenaphthene	120,000	0.029 U	0.44	0.028 U	0.8	0.84		
Acenaphthylene +	61.000	0.029 U	0.44 0.13 U	0.028 0	1.2	0.84		
Acenaphtnylene + Anthracene	61,000	0.029 U	0.13 0	0.029	1.5	0.99		
Benzo(a)anthracene	170	0.029 U	0.7	0.047 0.028 U	2.7	1.8		
Benzo(a)anunacene Benzo(b)fluoranthene	170	0.029 U	0.84	0.028 U	1.2	0.87		
Benzo(k)fluoranthene	1,700	0.029 U	0.48	0.028 U	0.76	0.75		
Benzo(g,h,i)perylene +	61,000	0.029 U	1.5	0.028 U	0.61	0.73		
Benzo(a)pyrene	17	0.029 U	0.91	0.028 U	1.7	1.1		
Chrysene	17.000	0.029 U	1.5	0.028 0	2.5	1.7		
Dibenzo(a,h)anthracene	17,000	0.029 U	0.13 U	0.028 U	0.25 U	0.3 U		
Fluoranthene	82,000	0.029 U	0.67	0.028 0	3.4	2.8		
Fluorene	82,000	0.029 U	0.53	0.073	3.4	0.87		
Indeno(1,2,3-cd)pyrene	170	0.029 U	1.1	0.028 U	0.56	0.34		
Naphthalene	4.100	0.029 U	0.68	0.11	0.25 U	2.1		
Phenanthrene +	61,000	0.036	2	0.17	3.8	3.7		
Pyrene	61,000	0.029 U	1.1	0.13	4.6	4		
Tyrono	01,000	PCBs (0.12	0	•		
Aroclor 1016		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U		
Aroclor 1221		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U		
Aroclor 1232		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U		
Aroclor 1242		0.095 U	3.7	0.093 U	1.3	0.15		
Aroclor 1248		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U		
Aroclor 1254		0.19 U	1.8	0.19 U	1.1	0.19 U		
Aroclor 1260		0.19 U	0.17 U	0.19 U	0.17 U	0.19 U		
Total PCBs	1	0.855 U	6.002	0.845 U	2.910	0.902		
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)				
Antimony	82	1.1 UJ	1 UJ	1.1 UJ	1.1 J	1.1 J		
Arsenic	61	7.2 J	5	12 J	4.8	3.4 J		
Barium	14,000	38 J	43 J	31 J	110 J	80 J		
Beryllium	410	0.55 U	0.62	0.93	1	0.9		
Cadmium	200	0.55 U	1.2	0.55 U	1.2	0.7		
Chromium	4,100	17 J	16 J	19 J	29 J	13 J		
Copper	8,200	27 J	33 J	29 J	91 J	35 J		
Lead	400	18	120 J	18	190 J	65		
Mercury	61	0.032	0.25	0.037	0.21	0.052		
Nickel	4,100	32 J	18 J	31 J	18 J	11 J		
Selenium	1,000	1.1 U	1 U	1.1 U	0.98 U	1.1 U		
Silver	1,000	1.1 U	1 U	1.1 U	0.98 U	1.1 U		
Thallium	160	1.1 U	1 U	1.2	1.3	1.5		
Zinc	61,000	50 J	200 J	45 J	260 J	88 J		
Total Cyanide	4,100	0.29 U	0.24 U	0.27 U	0.25 U	0.27 U		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) J Indicates an estimated value.
- $(8) + Screening\ level\ obtained\ from\ Table\ B:\ Soil\ Remediation\ Objectives\ for\ Industrial/Commercial\ Properties,\ Non-TACO\ Chemicals\ (Illinois\ EPA\ 2004).$
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample		th (feet below grou	ind surface)/Conce	ntration
	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7
		TCL Volat	iles (mg/kg)			
Acetone	200,000	0.042 U	0.12	0.064 U	0.041 U	0.14
Benzene	2,300	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromodichloromethane	2,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromoform	16,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromomethane	1,000	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
2-Butanone		0.017 U	0.027	0.026 U	0.017 U	0.024 U
Carbon Disulfide	20,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Carbon Tetrachloride	410	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chlorobenzene	4,100	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chloroethane +	82,000	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Chloroform	2,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chloromethane +	820	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Dibromochloromethane	41,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1-Dichloroethane	200,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,2-Dichloroethane	1,400	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1-Dichloroethene	1,800	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
cis-1,2-Dichloroethene	20,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
trans-1,2-Dichloroethene	41,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,2-Dichloropropane	1,800	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
cis-1,3-Dichloropropene	1,200	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
trans-1,3-Dichloropropene	1,200	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Ethylbenzene	20,000	0.01	0.012 U	0.013 U	0.015	0.012 U
2-Hexanone +	8,200	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
4-Methyl-2-Pentanone		0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Methylene Chloride	12,000	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA
Styrene	41,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1,2,2-Tetrachloroethane +	12,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Tetrachloroethene	2,400	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Toluene	410,000	0.0084 U	0.012 U	0.013 U	0.013	0.012 U
1,1,1-Trichloroethane		0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1,2-Trichloroethane	8,200	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Trichloroethene	1,200	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Vinyl Chloride	170	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
m,p-Xylene*	410,000	0.0084 U	0.012 U	0.013 U	0.043	0.012 U
o-Xylene*	410,000	0.0084 U	0.025	0.013 U	0.033	0.012 U
Xylenes, Total	410,000	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Tier 1						
	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002	
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7	
	п		atiles (mg/kg)				
Bis(2-chloroethoxy)methane		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Bis(2-chloroethyl)ether	75	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Bis(2-ethylhexyl)phthalate	4,100	2 U	0.4 U	0.39 U	2	0.4 U	
4-Bromophenyl phenyl ether		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Butyl benzyl phthalate	410,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Carbazole	6,200	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
4-Chloro-3-methylphenol +	41,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
4-Chloroaniline	820	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2-Chloronaphthalene		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2-Chlorophenol	10,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
4-Chlorophenyl phenyl ether		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Dibenzofuran +	820	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
1,2-Dichlorobenzene	18,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
1,3-Dichlorobenzene +	180	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
1,4-Dichlorobenzene		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
3,3´-Dichlorobenzidine	280	4.1 U	0.81 U	0.79 U	3.5 U	0.8 U	
2,4-Dichlorophenol	610	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Diethyl phthalate	1,000,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Dimethyl phthalate +	1,000,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Di-n-butyl phthalate	200,000	6.3	0.4 U	0.39 U	1.8 U	0.4 U	
2,4-Dimethylphenol	41,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
4,6-Dinitro-2-methylphenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U	
2,4-Dinitrophenol	410	9.9 U	2 U	1.9 U	8.6 U	1.9 U	
2,4-Dinitrotoluene	180	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2,6-Dinitrotoluene	180	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Di-n-octyl phthalate	4,100	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Hexachlorobenzene	78	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Hexachlorobutadiene +	41	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Hexachlorocyclopentadiene	14,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Hexachloroethane	2,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Isophorone	410,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2-Methylnaphthalene +	820	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2-Methylphenol	100,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
4-Methylphenol +	1,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2-Nitroaniline		9.9 U	2 U	1.9 U	8.6 U	1.9 U	
3-Nitroaniline		9.9 U	2 U	1.9 U	8.6 U	1.9 U	
4-Nitroaniline		9.9 U	2 U	1.9 U	8.6 U	1.9 U	
Nitrobenzene	1,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2-Nitrophenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U	
4-Nitrophenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U	
N-Nitrosodi-n-propylamine	18	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
N-Nitrosodiphenylamine	25,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2, 2'-Oxybis(1-Chloropropane)		0.087 U	0.017 U	0.017 U	0.075 U	0.017 U	
Pentachlorophenol	520	9.9 U	2 U	1.9 U	8.6 U	1.9 U	
Phenol	120,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
1,2,4-Trichlorobenzene	2,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2,4,5-Trichlorophenol	200,000	4.1 U	0.81 U	0.79 U	3.5 U	0.8 U	
2,4,6-Trichlorophenol NOTES:	11,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 3 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Tier 1							
G	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002		
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7		
A 1.1	120,000		(mg/kg)	0.02.11	0.12.17	0.12		
Acenaphthene	120,000	1.5 U	0.031 U	0.03 U	0.13 U	0.12		
Acenaphthylene +	61,000	1.6	0.031 U	0.03 U	0.19	0.086		
Anthracene	610,000	1.8	0.031 U	0.03 U	0.36	0.17		
Benzo(a)anthracene	170	2.8	0.031 U	0.03 U	0.13 U	0.094		
Benzo(b)fluoranthene	170	1.7	0.031 U	0.03 U	0.24	0.13		
Benzo(k)fluoranthene	1,700	1.5 U	0.031 U	0.03 U	0.24	0.14		
Benzo(g,h,i)perylene +	61,000	1.5 U	0.031 U	0.03 U	0.57	0.36		
Benzo(a)pyrene	17	1.8	0.031 U	0.03 U	0.13	0.14		
Chrysene	17,000	3.2	0.031 U	0.041	0.75	0.39		
Dibenzo(a,h)anthracene	17	1.5 U	0.031 U	0.03 U	0.13 U	0.11		
Fluoranthene	82,000	3.7	0.031 U	0.039	0.21	0.33		
Fluorene	82,000	1.5 U	0.031 U	0.03 U	0.13 U	0.31		
Indeno(1,2,3-cd)pyrene	170	1.5 U	0.031 U	0.03 U	0.29	0.24		
Naphthalene	4,100	2.1	0.14	0.042	0.38	0.03 U		
Phenanthrene +	61,000	4.1	0.076	0.083	1.3	0.13		
Pyrene	61,000	5.5	0.047	0.033	0.36	1.2		
			(mg/kg)	1				
Aroclor 1016		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U		
Aroclor 1221		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U		
Aroclor 1232		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U		
Aroclor 1242		2.5	0.096 U	0.094 U	0.87 U	0.098 U		
Aroclor 1248		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U		
Aroclor 1254		2.2	0.19 U	0.19 U	1.7 U	0.2 U		
Aroclor 1260		0.18 U	0.19 U	0.19 U	1.7 U	0.2 U		
Total PCBs	1	5.232	0.860 U	0.850 U	7.750 U	0.890 U		
			and Total Cyanide					
Antimony	82	1.1 UJ	1.1 UJ	1.1 UJ	1 UJ	1.2 UJ		
Arsenic	61	5.9	5.1 J	17 J	1.2	7.5 J		
Barium	14,000	100 J	97 J	63 J	59 J	100 J		
Beryllium	410	0.86	1.2	1	0.57	1.3		
Cadmium	200	0.59	0.59	0.54 U	0.54	0.59 U		
Chromium	4,100	11 J	17 J	16 J	5.1 J	21 J		
Copper	8,200	43 J	31 J	55 J	6.8 J	28 J		
Lead	400	140 J	17	30	25 J	19		
Mercury	61	0.28	0.046	0.023 U	0.026 U	0.031 U		
Nickel	4,100	12 J	26 J	30 J	7.4 J	33 J		
Selenium	1,000	1.1 U	1.1 U	1.1 U	1 U	1.2 U		
Silver	1,000	1.1 U	1.1 U	1.1 U	1 U	1.2 U		
Thallium	160	1.5	1.9	2	1.3	2.1		
Zinc	61,000	69 J	54 J	43 J	29 J	53 J		
Total Cyanide	4,100	0.29 U	0.34 U	0.29 U	0.27 U	0.31 U		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) J Indicates an estimated value.
- $(8) + Screening\ level\ obtained\ from\ Table\ B:\ Soil\ Remediation\ Objectives\ for\ Industrial/Commercial\ Properties,\ Non-TACO\ Chemicals\ (Illinois\ EPA\ 2004).$
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	ind surface)/Conce	ntration
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9
		TCL Volat	iles (mg/kg)			
Acetone	200,000	0.14	0.13	0.042 U	0.044 U	0.082
Benzene	2,300	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromodichloromethane	2,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromoform	16,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromomethane	1,000	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
2-Butanone		0.015	0.027	0.017 U	0.018 U	0.02 U
Carbon Disulfide	20,000	0.013	0.012 U	0.0084 U	0.0088 U	0.0099 U
Carbon Tetrachloride	410	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chlorobenzene	4,100	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chloroethane +	82,000	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Chloroform	2,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chloromethane +	820	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Dibromochloromethane	41,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1-Dichloroethane	200,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,2-Dichloroethane	1,400	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1-Dichloroethene	1,800	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
cis-1,2-Dichloroethene	20,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
trans-1,2-Dichloroethene	41,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,2-Dichloropropane	1,800	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
cis-1,3-Dichloropropene	1,200	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
trans-1,3-Dichloropropene	1,200	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Ethylbenzene	20,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
2-Hexanone +	8,200	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
4-Methyl-2-Pentanone		0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Methylene Chloride	12,000	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA
Styrene	41,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,2,2-Tetrachloroethane +	12,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Tetrachloroethene	2,400	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Toluene	410,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,1-Trichloroethane		0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,2-Trichloroethane	8,200	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Trichloroethene	1,200	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Vinyl Chloride	170	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
m,p-Xylene*	410,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
o-Xylene*	410,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Xylenes, Total	410,000	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002		
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9		
		TCL Semivol	atiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
Bis(2-chloroethyl)ether	75	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
Bis(2-ethylhexyl)phthalate	4,100	5.6	0.39 U	0.39 U	0.42 U	0.39 U		
4-Bromophenyl phenyl ether		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
Butyl benzyl phthalate	410,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
Carbazole	6,200	0.47	0.39 U	0.39 U	0.67	0.39 U		
4-Chloro-3-methylphenol +	41,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
4-Chloroaniline	820	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
2-Chloronaphthalene		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
2-Chlorophenol	10,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
4-Chlorophenyl phenyl ether		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
Dibenzofuran +	820	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
1,2-Dichlorobenzene	18,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
1,3-Dichlorobenzene +	180	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
1,4-Dichlorobenzene		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
3,3´-Dichlorobenzidine	280	0.71 U	0.79 U	0.77 U	0.85 U	0.77 U		
2,4-Dichlorophenol	610	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
Diethyl phthalate	1,000,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
Dimethyl phthalate +	1,000,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
Di-n-butyl phthalate	200,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
2,4-Dimethylphenol	41,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
4,6-Dinitro-2-methylphenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U		
2,4-Dinitrophenol	410	1.7 U	1.9 U	1.9 U	2.1 U	1.9 U		
2,4-Dinitrotoluene	180	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
2,6-Dinitrotoluene	180	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
Di-n-octyl phthalate	4,100	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
Hexachlorobenzene	78	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
Hexachlorobutadiene +	41	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
Hexachlorocyclopentadiene	14,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
Hexachloroethane	2,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
Isophorone	410,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
2-Methylnaphthalene +	820	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
2-Methylphenol	100,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
4-Methylphenol +	1,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
2-Nitroaniline		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U		
3-Nitroaniline		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U		
4-Nitroaniline		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U		
Nitrobenzene	1,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
2-Nitrophenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U		
4-Nitrophenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U		
N-Nitrosodi-n-propylamine	18	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
N-Nitrosodiphenylamine	25,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
2, 2'-Oxybis(1-Chloropropane)		0.015 U	0.017 U	0.016 U	0.018 U	0.016 U		
Pentachlorophenol	520	1.7 U	1.9 U	1.9 U	2.1 U	1.9 U		
Phenol	120,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
1,2,4-Trichlorobenzene	2,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		
2,4,5-Trichlorophenol	200,000	0.71 U	0.79 U	0.77 U	0.85 U	0.77 U		
2,4,6-Trichlorophenol	11,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U		

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	h (feet below grou	nd surface)/Concer	ntration
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9
		PAHs ((mg/kg)			
Acenaphthene	120,000	0.11	0.03 U	0.029 U	0.13	0.029 U
Acenaphthylene +	61,000	0.082	0.03 U	0.029 U	0.074	0.029 U
Anthracene	610,000	0.15	0.03 U	0.029 U	0.33	0.029 U
Benzo(a)anthracene	170	0.19	0.064	0.029 U	0.17	0.029 U
Benzo(b)fluoranthene	170	0.47	0.041	0.029 U	0.38	0.029 U
Benzo(k)fluoranthene	1,700	0.53	0.056	0.029 U	0.87	0.029 U
Benzo(g,h,i)perylene +	61,000	0.57	0.037	0.029 U	0.35	0.029 U
Benzo(a)pyrene	17	0.33	0.072	0.029 U	0.32	0.029 U
Chrysene	17,000	0.71	0.066	0.029 U	1.1	0.029 U
Dibenzo(a,h)anthracene	17	0.076	0.03 U	0.029 U	0.19	0.029 U
Fluoranthene	82,000	0.55	0.074	0.029 U	2	0.029 U
Fluorene	82,000	0.086	0.03 U	0.029 U	0.12	0.029 U
Indeno(1,2,3-cd)pyrene	170	0.18	0.036	0.029 U	0.36	0.029 U
Naphthalene	4,100	0.16	0.03 U	0.029 U	0.18	0.056
Phenanthrene +	61,000	0.7	0.03 U	0.029 U	1	0.029 U
Pyrene	61,000	0.63	0.074	0.029 U	2.1	0.029 U
		PCBs (mg/kg)			
Aroclor 1016		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1221		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1232		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1242		8.5	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1248		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1254		6	0.19 U	0.19 U	0.2 U	0.18 U
Aroclor 1260		0.17 U	0.19 U	0.19 U	0.2 U	0.18 U
Total PCBs	1	15.014	0.855 U	0.855 U	0.900 U	0.820 U
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony	82	6.5 J	1.1 UJ	1.1 UJ	1.2 UJ	0.97 UJ
Arsenic	61	20	5.8 J	12 J	7.2	15 J
Barium	14,000	520 J	98 J	89 J	120 J	98 J
Beryllium	410	1.4	0.83	1.1	1.1	1.2
Cadmium	200	8.1	0.56 U	0.56 U	0.72	0.53
Chromium	4,100	320 J	11 J	20 J	19 J	20 J
Copper	8,200	480 J	11 J	30 J	28 J	38 J
Lead	400	1400 J	36	25	61 J	22
Mercury	61	2.6	0.14	0.024 U	0.33	0.026 U
Nickel	4,100	210 J	12 J	35 J	26 J	38 J
Selenium	1,000	0.99 U	1.1 U	1.1 U	1.2 U	0.97 U
Silver	1,000	1	1.1 U	1.1 U	1.2 U	0.97 U
Thallium	160	1.3	2	2.2	2	2
Zinc	61,000	1600 J	40 J	49 J	73 J	46 J
Total Cyanide	4,100	0.28 U	0.29 U	0.24 U	0.35 U	0.25 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) J Indicates an estimated value.
- $(8) + Screening \ level \ obtained \ from \ Table \ B: Soil \ Remediation \ Objectives \ for \ Industrial/Commercial \ Properties, \ Non-TACO \ Chemicals \ (Illinois \ EPA \ 2004).$
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 3 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	ind surface)/Conce	entration
	Screening	SP37-003	SB38-001	SP39-001	SP39-002	SP39-003
Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11
		TCL Volat	iles (mg/kg)			
Acetone	200,000	0.066 J	0.12 J	0.036 U	0.11	0.047 U
Benzene	2,300	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromodichloromethane	2,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromoform	16,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromomethane	1,000	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
2-Butanone		0.023 U	0.029 UJ	0.014 U	0.027	0.019 U
Carbon Disulfide	20,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Carbon Tetrachloride	410	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chlorobenzene	4,100	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chloroethane +	82,000	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Chloroform	2,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chloromethane +	820	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Dibromochloromethane	41,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1-Dichloroethane	200,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,2-Dichloroethane	1,400	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1-Dichloroethene	1,800	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
cis-1,2-Dichloroethene	20,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
trans-1,2-Dichloroethene	41,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,2-Dichloropropane	1,800	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
cis-1,3-Dichloropropene	1,200	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
trans-1,3-Dichloropropene	1,200	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Ethylbenzene	20,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
2-Hexanone +	8,200	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
4-Methyl-2-Pentanone		0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Methylene Chloride	12,000	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA
Styrene	41,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1,2,2-Tetrachloroethane +	12,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Tetrachloroethene	2,400	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Toluene	410,000	0.012 U	0.014 UJ	0.008	0.013 U	0.0094 U
1,1,1-Trichloroethane		0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1,2-Trichloroethane	8,200	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Trichloroethene	1,200	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Vinyl Chloride	170	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
m,p-Xylene*	410,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
o-Xylene*	410,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Xylenes, Total	410,000	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) J Indicates an estimated value.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

- (7) NA Not analyzed.
 (8) * The "total xylenes" screening level was used because it is more conservative.
 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Tier 1						
Commons 1/A 1	Screening	SP37-003	SB38-001	SP39-001	SP39-002	SP39-003 10-11	
Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11	
D' (2 -11 1) 1			atiles (mg/kg)	1711	0.4.11	0.20 11	
Bis(2-chloroethoxy)methane	75	0.38 U 0.38 U	0.42 U 0.42 U	1.7 U 1.7 U	0.4 U 0.4 U	0.38 U 0.38 U	
Bis(2-chloroethyl)ether							
Bis(2-ethylhexyl)phthalate	4,100	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
4-Bromophenyl phenyl ether		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Butyl benzyl phthalate	410,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Carbazole	6,200	0.38 U	0.53	1.7 U	0.4 U	0.38 U	
4-Chloro-3-methylphenol +	41,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
4-Chloroaniline	820	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2-Chloronaphthalene		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2-Chlorophenol	10,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
4-Chlorophenyl phenyl ether		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Dibenzofuran +	820	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
1,2-Dichlorobenzene	18,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
1,3-Dichlorobenzene +	180	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
1,4-Dichlorobenzene		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
3,3´-Dichlorobenzidine	280	0.75 U	0.83 U	3.5 U	0.8 U	0.77 U	
2,4-Dichlorophenol	610	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Diethyl phthalate	1,000,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Dimethyl phthalate +	1,000,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Di-n-butyl phthalate	200,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2,4-Dimethylphenol	41,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
4,6-Dinitro-2-methylphenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U	
2,4-Dinitrophenol	410	1.8 U	2 U	8.4 U	1.9 U	1.9 U	
2,4-Dinitrotoluene	180	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2,6-Dinitrotoluene	180	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Di-n-octyl phthalate	4,100	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Hexachlorobenzene	78	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Hexachlorobutadiene +	41	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Hexachlorocyclopentadiene	14,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Hexachloroethane	2,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
Isophorone	410,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2-Methylnaphthalene +	820	0.38 U	1.7	1.7 U	0.4 U	0.38 U	
2-Methylphenol	100,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
4-Methylphenol +	1,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2-Nitroaniline		1.8 U	2 U	8.4 U	1.9 U	1.9 U	
3-Nitroaniline		1.8 U	2 U	8.4 U	1.9 U	1.9 U	
4-Nitroaniline		1.8 U	2 U	8.4 U	1.9 U	1.9 U	
Nitrobenzene	1,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2-Nitrophenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U	
4-Nitrophenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U	
N-Nitrosodi-n-propylamine	18	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
N-Nitrosodiphenylamine	25,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.018 U	0.074 U	0.017 U	0.016 U	
Pentachlorophenol	520	1.8 U	2 U	8.4 U	1.9 U	1.9 U	
Phenol	120,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
1,2,4-Trichlorobenzene	2,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	
2,4,5-Trichlorophenol	200,000	0.75 U	0.83 U	3.5 U	0.8 U	0.77 U	
2,4,6-Trichlorophenol NOTES:	11,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U	

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SP37-003	SB38-001	SP39-001	SP39-002	SP39-003	
Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11	
		PAHs (mg/kg)				
Acenaphthene	120,000	0.028 U	0.42	1.3 U	0.056	0.029 U	
Acenaphthylene +	61,000	0.028 U	0.37	1.3 U	0.03 U	0.029 U	
Anthracene	610,000	0.028 U	1.7	1.3 U	0.29	0.03	
Benzo(a)anthracene	170	0.028 U	1.9	1.3 U	0.13	0.029 U	
Benzo(b)fluoranthene	170	0.028 U	1.1	1.3 U	0.58	0.029 U	
Benzo(k)fluoranthene	1,700	0.028 U	0.96	1.3 U	0.65	0.029 U	
Benzo(g,h,i)perylene +	61,000	0.028 U	0.46	1.3 U	0.31	0.029 U	
Benzo(a)pyrene	17	0.028 U	0.89	1.3 U	0.64	0.029 U	
Chrysene	17,000	0.028 U	2.3	1.3 U	1.1	0.056	
Dibenzo(a,h)anthracene	17	0.028 U	0.15	1.3 U	0.23	0.029 U	
Fluoranthene	82,000	0.028 U	4.1	1.3 U	1.6	0.081	
Fluorene	82,000	0.028 U	0.7	1.3 U	0.056	0.029 U	
Indeno(1,2,3-cd)pyrene	170	0.028 U	0.38	1.3 U	0.3 U	0.029 U	
Naphthalene	4,100	0.028 U	2	1.3 U	0.032	0.029 U	
Phenanthrene +	61,000	0.028 U	5.7	1.3	0.81	0.071	
Pyrene	61,000	0.028 U	4.7	2	1.7	0.076	
		PCBs (mg/kg)				
Aroclor 1016		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U	
Aroclor 1221		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U	
Aroclor 1232		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U	
Aroclor 1242		0.092 U	0.1 U	0.087 U	0.1 U	0.14	
Aroclor 1248		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U	
Aroclor 1254		0.18 U	0.2 U	0.17 U	0.2 U	0.19 U	
Aroclor 1260		0.18 U	0.2 U	0.17 U	0.2 U	0.19 U	
Total PCBs	1	0.820 U	0.900 U	0.775 U	0.900 U	0.900	
		Pollutant Metals a	nd Total Cyanide	(mg/kg)			
Antimony	82	1.2 UJ	1.3 UJ	1.1 UJ	6 J	1 UJ	
Arsenic	61	7.7 J	7.7 J	1.7	10 J	8.1 J	
Barium	14,000	85 J	49 J	57 J	140 J	83 J	
Beryllium	410	1.1	1.1	0.59	1.1	1.1	
Cadmium	200	0.59 U	0.69	0.95	1	0.51 U	
Chromium	4,100	19 J	22 J	5.6 J	11 J	19 J	
Copper	8,200	25 J	33 J	9.1 J	59 J	30 J	
Lead	400	17	40	23 J	970	19	
Mercury	61	0.029 U	0.051	0.025 U	6.2	0.027	
Nickel	4,100	25 J	28 J	8.8 J	13 J	29 J	
Selenium	1,000	1.2 U	1.3 U	1.1 U	1.1 U	1 U	
Silver	1,000	1.2 U	1.3 U	1.1 U	1.1 U	1 U	
Thallium	160	1.8	1.5	1.4	1.6	1.9	
Zinc	61,000	37 J	88 J	33 J	200 J	40 J	
Total Cyanide	4,100	0.31 U	0.33 U	0.28 U	0.31 U	0.3 U	

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) J Indicates an estimated value.
- (8) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- $(9)\ Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	nd surface)/Conce	ntration
	Screening	SP40-002	SP40-003	SP43-001	SP43-002	SP43-003
Compound/Analyte	Level (mg/kg)	7-8	14-15	2-3	3.5-4.5	11-12
	',	TCL Volat	iles (mg/kg)			
Acetone	200,000	0.071	0.043 U	0.15	0.063 U	0.041 U
Benzene	2,300	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromodichloromethane	2,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromoform	16,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromomethane	1,000	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
2-Butanone		0.02 U	0.017 U	0.031	0.025 U	0.017 U
Carbon Disulfide	20,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Carbon Tetrachloride	410	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chlorobenzene	4,100	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chloroethane +	82,000	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Chloroform	2,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chloromethane +	820	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Dibromochloromethane	41,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1-Dichloroethane	200,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,2-Dichloroethane	1,400	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1-Dichloroethene	1,800	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
cis-1,2-Dichloroethene	20,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
trans-1,2-Dichloroethene	41,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,2-Dichloropropane	1,800	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
cis-1,3-Dichloropropene	1,200	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
trans-1,3-Dichloropropene	1,200	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Ethylbenzene	20,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
2-Hexanone +	8,200	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
4-Methyl-2-Pentanone		0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Methylene Chloride	12,000	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	NA
Styrene	41,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,2,2-Tetrachloroethane +	12,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Tetrachloroethene	2,400	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Toluene	410,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,1-Trichloroethane		0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,2-Trichloroethane	8,200	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Trichloroethene	1,200	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Vinyl Chloride	170	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
m,p-Xylene*	410,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
o-Xylene*	410,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Xylenes, Total	410,000	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Tier 1	SP40-002			SP43-002	SP43-003	
Compour 4/A = sl-st-	Screening		SP40-003 14-15	SP43-001 2-3	SP43-002 3.5-4.5	SP43-003 11-12	
Compound/Analyte	Level (mg/kg)	7-8	atiles (mg/kg)	2-3	3.3-4.3	11-12	
Bis(2-chloroethoxy)methane	I I	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
Bis(2-chloroethyl)ether	75	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
Bis(2-ethylhexyl)phthalate	4.100	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
4-Bromophenyl phenyl ether	4,100	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
Butyl benzyl phthalate	410.000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
Carbazole	6,200	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
4-Chloro-3-methylphenol +	41.000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
4-Chloroaniline	820	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
2-Chloronaphthalene		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
2-Chlorophenol	10.000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
4-Chlorophenyl phenyl ether		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
Dibenzofuran +	820	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
1,2-Dichlorobenzene	18,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
1,3-Dichlorobenzene +	180	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
1,4-Dichlorobenzene		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
3,3´-Dichlorobenzidine	280	0.77 U	0.77 U	0.45 U	0.78 U	0.78 U	
2,4-Dichlorophenol	610	0.39 U	0.39 U	0.43 U	0.39 U	0.78 U	
Diethyl phthalate	1,000,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
Dimethyl phthalate +	1.000,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
Di-n-butyl phthalate	200,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
2,4-Dimethylphenol	41,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
4,6-Dinitro-2-methylphenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U	
2.4-Dinitrophenol	410	1.9 U	1.9 U	2.1 U	1.9 U	1.9 U	
2,4-Dinitrophenol	180	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
2,6-Dinitrotoluene	180	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
Di-n-octyl phthalate	4,100	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
Hexachlorobenzene	78	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
Hexachlorobutadiene +	41	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
Hexachlorocyclopentadiene	14,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
Hexachloroethane	2,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
Isophorone	410,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
2-Methylnaphthalene +	820	0.39 U	0.39 U	0.43 U	1.6	0.39 U	
2-Methylphenol	100,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
4-Methylphenol +	1,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
2-Nitroaniline		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U	
3-Nitroaniline		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U	
4-Nitroaniline		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U	
Nitrobenzene	1,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
2-Nitrophenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U	
4-Nitrophenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U	
N-Nitrosodi-n-propylamine	18	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
N-Nitrosodiphenylamine	25,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.018 U	0.016 U	0.016 U	
Pentachlorophenol	520	1.9 U	1.9 U	2.1 U	1.9 U	1.9 U	
Phenol	120,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
1,2,4-Trichlorobenzene	2,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	
2,4,5-Trichlorophenol	200,000	0.77 U	0.77 U	0.85 U	0.78 U	0.78 U	
2,4,6-Trichlorophenol	11,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U	

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	h (feet below grou	nd surface)/Conce	ntration
	Screening	SP40-002	SP40-003	SP43-001	SP43-002	SP43-003
Compound/Analyte	Level (mg/kg)	7-8	14-15	2-3	3.5-4.5	11-12
		PAHs ((mg/kg)	<u> </u>		
Acenaphthene	120,000	0.029 U	0.029 U	0.072	0.062	0.029 U
Acenaphthylene +	61,000	0.029 U	0.029 U	0.17	0.074	0.029 U
Anthracene	610,000	0.029 U	0.029 U	0.032 U	0.029	0.029 U
Benzo(a)anthracene	170	0.029 U	0.029 U	0.045	0.09	0.029 U
Benzo(b)fluoranthene	170	0.029 U	0.029 U	0.12	0.13	0.029 U
Benzo(k)fluoranthene	1,700	0.029 U	0.029 U	0.098	0.11	0.029 U
Benzo(g,h,i)perylene +	61,000	0.029 U	0.029 U	0.062	0.087	0.029 U
Benzo(a)pyrene	17	0.029 U	0.029 U	0.056	0.13	0.029 U
Chrysene	17,000	0.029 U	0.029 U	0.3	0.16	0.029 U
Dibenzo(a,h)anthracene	17	0.029 U	0.029 U	0.032 U	0.038	0.029 U
Fluoranthene	82,000	0.029 U	0.029 U	0.15	0.17	0.029 U
Fluorene	82,000	0.029 U	0.029 U	0.032 U	0.16	0.029 U
Indeno(1,2,3-cd)pyrene	170	0.029 U	0.029 U	0.043	0.076	0.029 U
Naphthalene	4,100	0.029 U	0.029 U	0.062	0.22	0.029 U
Phenanthrene +	61,000	0.029 U	0.029 U	0.19	0.38	0.029 U
Pyrene	61,000	0.029 U	0.029 U	0.14	0.088	0.029 U
			(mg/kg)			
Aroclor 1016		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U
Aroclor 1221		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U
Aroclor 1232		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U
Aroclor 1242		0.093 U	0.094 U	0.1 U	0.28	0.097 U
Aroclor 1248		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U
Aroclor 1254		0.19 U	0.19 U	0.21 U	0.26	0.19 U
Aroclor 1260		0.19 U	0.19 U	0.21 U	0.2 U	0.19 U
Total PCBs	1 1	0.845 U	0.850 U	0.920 U	1.136	0.865 U
-			and Total Cyanide			
Antimony	82	1.1 UJ	1 UJ	1.3 UJ	NA	1 UJ
Arsenic	61	10 J	8.3 J	9.5	NA	9 J
Barium	14,000	88 J	87 J	170 J	NA	91 J
Beryllium	410	1.1	1.1	1.2	NA	1.1
Cadmium	200	0.56 U	0.52 U	0.85	NA	0.5 U
Chromium	4,100	16 J	19 J	16 J	NA	21 J
Copper	8,200	33 J	28 J	73 J	NA	30 J 19
Lead	400	19	17	69 J	NA	-
Mercury	61	0.029 U	0.028 U	0.18	NA NA	0.03 U
Nickel Solonium	4,100 1,000	36 J 1.1 U	28 J 1 U	20 J	NA NA	33 J 1 U
Selenium Silver	1,000	1.1 U 1.1 U	1 U	1.3 U 1.3 U	NA NA	1 U
Silver Thallium		2.2	1.9	1.3 U 1.9		1.9
I hallium Zinc	160			1.9 100 J	NA NA	
·	61,000 4,100	52 J	45 J	0.35 U	NA NA	46 J
Total Cyanide NOTES:	4,100	0.32 U	0.27 U	0.55 U	NA	0.27 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
 (6) Shaded value exceeds Tier 1 screening level.
- (7) J Indicates an estimated value.
- (8) NA Not analyzed.
- (9) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- $(10) \ Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SP45-002, SB50-001, SP57-001, and SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			th (feet below grou		
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12
		TCL Vola	tiles (mg/kg)			
Acetone	200,000	0.079 U	0.082	0.069 U	0.065	0.036 U
Benzene	2,300	0.016 U	0.0089 U	0.014 U	0.12	0.0073 U
Bromodichloromethane	2,000	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Bromoform	16,000	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Bromomethane	1,000	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
2-Butanone		0.031 U	0.018 U	0.028 U	0.034	0.015 U
Carbon Disulfide	20,000	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Carbon Tetrachloride	410	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Chlorobenzene	4,100	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Chloroethane +	82,000	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
Chloroform	2,000	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Chloromethane +	820	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Dibromochloromethane	41,000	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,1-Dichloroethane	200,000	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,2-Dichloroethane	1,400	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,1-Dichloroethene	1,800	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
cis-1,2-Dichloroethene	20,000	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
trans-1,2-Dichloroethene	41,000	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,2-Dichloropropane	1,800	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
cis-1,3-Dichloropropene	1,200	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
trans-1,3-Dichloropropene	1,200	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Ethylbenzene	20,000	0.016 U	0.0089 U	0.014 U	0.37	0.0073 U
2-Hexanone +	8,200	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
4-Methyl-2-Pentanone		0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
Methylene Chloride	12,000	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
Methyl tert-butyl ether	2,000	NA	NA	NA	NA	0.0073 U
Styrene	41,000	0.016 U	0.0089 U	0.014 U	0.014	0.0073 U
1,1,2,2-Tetrachloroethane +	12,000	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Tetrachloroethene	2,400	0.023	0.0089 U	0.014 U	0.0094 U	0.0073 U
Toluene	410,000	0.016 U	0.0089 U	0.014 U	0.025	0.0073 U
1,1,1-Trichloroethane		0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,1,2-Trichloroethane	8,200	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Trichloroethene	1,200	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Vinyl Chloride	170	0.031 U	0.018 U	0.028 U	0.019 U	0.0073 U
m,p-Xylene*	410,000	0.016 U	0.0089 U	0.014 U	0.057	NA
o-Xylene*	410,000	0.016 U	0.0089 U	0.014 U	0.17	NA
Xylenes, Total	410,000	NA	NA	NA	NA	0.015 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	h (feet below grou	nd surface)/Concer	ntration
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12
		TCL Semivol	latiles (mg/kg)			
Bis(2-chloroethoxy)methane		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Bis(2-chloroethyl)ether	75	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Bis(2-ethylhexyl)phthalate	4,100	9.7	0.4 U	0.39 U	2.1	0.43 U
4-Bromophenyl phenyl ether		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Butyl benzyl phthalate	410,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Carbazole	6,200	1.9 U	0.4 U	0.39 U	0.87	0.87
4-Chloro-3-methylphenol +	41,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
4-Chloroaniline	820	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
2-Chloronaphthalene		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
2-Chlorophenol	10,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
4-Chlorophenyl phenyl ether		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Dibenzofuran +	820	1.9 U	0.4 U	0.39 U	0.35 U	1.8
1,2-Dichlorobenzene	18,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
1,3-Dichlorobenzene +	180	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
1,4-Dichlorobenzene		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
3,3'-Dichlorobenzidine	280	3.9 U	0.79 U	0.77 U	0.69 U	0.86 U
2,4-Dichlorophenol	610	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Diethyl phthalate	1,000,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Dimethyl phthalate +	1,000,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Di-n-butyl phthalate	200,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
2,4-Dimethylphenol	41,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
4,6-Dinitro-2-methylphenol		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U
2,4-Dinitrophenol	410	9.4 U	1.9 U	1.9 U	1.7 U	2.1 U
2,4-Dinitrotoluene	180	1.9 U	0.4 U	0.39 U	0.35 U	0.22 U
2,6-Dinitrotoluene	180	1.9 U	0.4 U	0.39 U	0.35 U	0.22 U
Di-n-octyl phthalate	4,100	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Hexachlorobenzene	78	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Hexachlorobutadiene +	41	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Hexachlorocyclopentadiene	14,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Hexachloroethane	2,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
Isophorone	410,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
2-Methylnaphthalene +	820	1.9 U	0.4 U	0.39 U	1.7	2.8
2-Methylphenol	100,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
4-Methylphenol +	1,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
2-Nitroaniline		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U
3-Nitroaniline		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U
4-Nitroaniline		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U
Nitrobenzene	1,000	1.9 U	0.4 U	0.39 U	0.35 U	0.22 U
2-Nitrophenol		9.4 U	1.9 U	1.9 U	1.7 U	0.43 U
4-Nitrophenol		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U
N-Nitrosodi-n-propylamine	18	1.9 U	0.4 U	0.39 U	0.35 U	0.22 U
N-Nitrosodiphenylamine	25,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
2, 2'-Oxybis(1-Chloropropane)		0.082 U	0.017 U	0.016 U	0.015 U	0.43 U
Pentachlorophenol	520	9.4 U	1.9 U	1.9 U	1.7 U	2.1 U
Phenol	120,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
1,2,4-Trichlorobenzene	2,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U
2,4,5-Trichlorophenol	200,000	3.9 U	0.79 U	0.77 U	0.69 U	0.86 U
2,4,6-Trichlorophenol	11,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			th (feet below grou	nd surface)/Concer	ntration
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12
			(mg/kg)			
Acenaphthene	120,000	0.15 U	0.03 U	0.029 U	0.74	4.9
Acenaphthylene +	61,000	0.15 U	0.03 U	0.029 U	0.65	0.73
Anthracene	610,000	0.16	0.03 U	0.029 U	1.9	6.4
Benzo(a)anthracene	170	0.15 U	0.03 U	0.029 U	2.5	5.8
Benzo(b)fluoranthene	170	0.78	0.03 U	0.029 U	2	4.5
Benzo(k)fluoranthene	1,700	0.81	0.03 U	0.029 U	1.9	4.1
Benzo(g,h,i)perylene +	61,000	1.1	0.03 U	0.029 U	1.3	2.7
Benzo(a)pyrene	17	0.45	0.03 U	0.029 U	2.4	5.9
Chrysene	17,000	0.83	0.03 U	0.029 U	3.9	5.4
Dibenzo(a,h)anthracene	17	0.25	0.03 U	0.029 U	0.37	0.83
Fluoranthene	82,000	0.45	0.03 U	0.029 U	4.1	13
Fluorene	82,000	0.15 U	0.03 U	0.029 U	1.2	3.8
Indeno(1,2,3-cd)pyrene	170	0.69	0.03 U	0.029 U	0.94	2.4
Naphthalene	4,100	0.15 U	0.03 U	0.029 U	1.8	6.5
Phenanthrene +	61,000	0.42	0.03 U	0.029 U	3.6	17
Pyrene	61,000	0.64	0.03 U	0.029 U	6.8	14
			(mg/kg)			
Aroclor 1016		0.094 U	0.096 U	0.093 U	0.084 U	NA
Aroclor 1221		0.094 U	0.096 U	0.093 U	0.084 U	NA
Aroclor 1232		0.094 U	0.096 U	0.093 U	0.084 U	NA
Aroclor 1242		1.5	0.096 U	0.093 U	5.2 U	NA
Aroclor 1248		0.094 U	0.096 U	0.093 U	0.084 U	NA
Aroclor 1254		1	0.19 U	0.19 U	5.2 U	NA
Aroclor 1260		0.19 U	0.19 U	0.19 U	0.17 U	NA
Гotal PCBs	1	3.066	0.860 U	0.845 U	10.906 U	NA
		Pollutant Metals	and Total Cyanide			
Antimony	82	0.98 J	1.1 UJ	1.2 UJ	0.95 UJ	NA
Arsenic	61	3.8	13 J	9.3 J	7.6	NA
Barium	14,000	140 J	79 J	94 J	59 J	NA
Beryllium	410	1.1	1.2	1.2	0.63	NA
Cadmium	200	1.5	0.57 U	0.58 U	1.1	NA
Chromium	4,100	21 J	20 J	20 J	13 J	NA
Copper	8,200	79 J	31 J	33 J	42 J	NA
Lead	400	210 J	19	20	240 J	NA
Mercury	61	0.38	0.03 U	0.026 U	0.3	NA
Nickel	4,100	16 J	39 J	35 J	17 J	NA
Selenium	1,000	0.94 U	1.1 U	1.2 U	0.95 U	NA
Silver	1,000	0.94 U	1.1 U	1.2 U	0.95 U	NA
Гhallium	160	1.3	1.8	2.3	0.95 U	NA
Zinc	61,000	290 J	52 J	45 J	140 J	NA
Total Cyanide	4,100	0.28 U	0.32 U	0.31 U	1.3	NA

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) Shaded value exceeds Tier 1 screening level.
- (7) $\, J$ Indicates an estimated value.
- (8) NA Not analyzed.
- $(9) + Screening \ level \ obtained \ from \ Table \ B: Soil \ Remediation \ Objectives \ for \ Industrial/Commercial \ Properties, \ Non-TACO \ Chemicals \ (Illinois \ EPA \ 2004).$
- (10) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration					
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002	
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20	
	11		iles (mg/kg)				
Acetone	200,000	0.031 U	0.035 U	0.032 U	0.036 U	0.03 U	
Benzene	2,300	0.0062 U	0.05	0.0065 U	0.0072 U	0.0059 U	
Bromodichloromethane	2.000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
Bromoform	16.000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
Bromomethane	1,000	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U	
2-Butanone		0.012 U	0.014 U	0.013 U	0.014 U	0.012 U	
Carbon Disulfide	20,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
Carbon Tetrachloride	410	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
Chlorobenzene	4,100	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
Chloroethane +	82,000	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U	
Chloroform	2,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
Chloromethane +	820	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
Dibromochloromethane	41,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
1,1-Dichloroethane	200,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
1,2-Dichloroethane	1,400	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
1,1-Dichloroethene	1,800	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
cis-1,2-Dichloroethene	20,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
trans-1,2-Dichloroethene	41,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
1,2-Dichloropropane	1,800	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
cis-1,3-Dichloropropene	1,200	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
trans-1,3-Dichloropropene	1,200	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
Ethylbenzene	20,000	0.0062 U	0.33	0.0065 U	0.0072 U	0.0059 U	
2-Hexanone +	8,200	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U	
4-Methyl-2-Pentanone		0.012 U	0.014 U	0.013 U	0.014 U	0.012 U	
Methylene Chloride	12,000	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U	
Methyl tert-butyl ether	2,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
Styrene	41,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
1,1,2,2-Tetrachloroethane +	12,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
Tetrachloroethene	2,400	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
Toluene	410,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
1,1,1-Trichloroethane		0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
1,1,2-Trichloroethane	8,200	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
Trichloroethene	1,200	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
Vinyl Chloride	170	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U	
m,p-Xylene*	410,000	NA	NA	NA	NA	NA	
o-Xylene*	410,000	NA	NA	NA	NA	NA	
Xylenes, Total	410,000	0.012 U	0.26	0.013 U	0.014 U	0.012 U	

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	·					
	Tier 1		Location and Dept	th (feet below grou	nd surface)/Conce	
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20
		TCL Semivo	latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Bis(2-chloroethyl)ether	75	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Bis(2-ethylhexyl)phthalate	4,100	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Bromophenyl phenyl ether		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Butyl benzyl phthalate	410,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Carbazole	6,200	0.42 U	1.1	0.41 U	0.57	0.41 U
4-Chloro-3-methylphenol +	41,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Chloroaniline	820	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2-Chloronaphthalene		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2-Chlorophenol	10,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Chlorophenyl phenyl ether		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Dibenzofuran +	820	0.42 U	2.5	0.41 U	1.5	0.41 U
1,2-Dichlorobenzene	18,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
1,3-Dichlorobenzene +	180	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
1,4-Dichlorobenzene		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
3,3'-Dichlorobenzidine	280	0.83 U	0.88 U	0.82 U	0.89 U	0.82 U
2,4-Dichlorophenol	610	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Diethyl phthalate	1,000,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Dimethyl phthalate +	1,000,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Di-n-butyl phthalate	200,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2,4-Dimethylphenol	41,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4,6-Dinitro-2-methylphenol		2 U	2.1 U	2 U	2.2 U	2 U
2,4-Dinitrophenol	410	2 U	2.1 U	2 U	2.2 U	2 U
2,4-Dinitrotoluene	180	0.21 U	0.23 U	0.21 U	0.23 U	0.21 U
2,6-Dinitrotoluene	180	0.21 U	0.23 U	0.21 U	0.23 U	0.21 U
Di-n-octyl phthalate	4,100	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Hexachlorobenzene	78	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Hexachlorobutadiene +	41	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Hexachlorocyclopentadiene	14,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Hexachloroethane	2,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Isophorone	410,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2-Methylnaphthalene +	820	0.42 U	27	0.41 U	2.5	1.1
2-Methylphenol	100,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Methylphenol +	1,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2-Nitroaniline		2 U	2.1 U	2 U	2.2 U	2 U
3-Nitroaniline		2 U	2.1 U	2 U	2.2 U	2 U
4-Nitroaniline	1.000	2 U	2.1 U	2 U	2.2 U	2 U
Nitrobenzene	1,000	0.21 U	0.23 U	0.21 U	0.23 U	0.21 U
2-Nitrophenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Nitrophenol		2 U	2.1 U	2 U	2.2 U	2 U
N-Nitrosodi-n-propylamine	18	0.21 U	0.23 U	0.21 U	0.23 U	0.21 U
N-Nitrosodiphenylamine	25,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2, 2'-Oxybis(1-Chloropropane)		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Pentachlorophenol	520	2 U	2.1 U	2 U	2.2 U	2 U
Phenol	120,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
1,2,4-Trichlorobenzene	2,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U 0.82 U
2,4,5-Trichlorophenol	,	0.83 U	0.88 U	0.82 U	0.89 U	
2,4,6-Trichlorophenol	11,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 3 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	nd surface)/Conce	entration
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20
		PAHs ((mg/kg)			
Acenaphthene	120,000	0.17	22	0.074	5.9	0.41
Acenaphthylene +	61,000	0.033	2.7	0.031 U	0.99	0.031 U
Anthracene	610,000	0.19	11	0.031 U	9.5	0.16
Benzo(a)anthracene	170	0.17	9	0.032	8.6	0.11
Benzo(b)fluoranthene	170	0.075	4.5	0.031 U	5.5	0.063
Benzo(k)fluoranthene	1,700	0.12	5.1	0.031 U	6.2	0.082
Benzo(g,h,i)perylene +	61,000	0.046	3.9	0.031 U	5.5	0.034
Benzo(a)pyrene	17	0.086	4.6	0.031 U	9.8	0.088
Chrysene	17,000	0.2	8	0.048	8.1	0.14
Dibenzo(a,h)anthracene	17	0.031 U	0.91	0.031 U	1.2	0.031 U
Fluoranthene	82,000	0.42	20	0.072	20	0.22
Fluorene	82,000	0.13	13	0.04	3.5	0.26
Indeno(1,2,3-cd)pyrene	170	0.035	2.5	0.031 U	4.2	0.031 U
Naphthalene	4,100	0.4	33	0.13	5.3	7.8
Phenanthrene +	61,000	0.6	43	0.12	21	0.52
Pyrene	61,000	0.52	26	0.088	22	0.21
		PCBs ((mg/kg)			
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Total PCBs	1	NA	NA	NA	NA	NA
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony	82	NA	NA	NA	NA	NA
Arsenic	61	NA	NA	NA	NA	NA
Barium	14,000	NA	NA	NA	NA	NA
Beryllium	410	NA	NA	NA	NA	NA
Cadmium	200	NA	NA	NA	NA	NA
Chromium	4,100	NA	NA	NA	NA	NA
Copper	8,200	NA	NA	NA	NA	NA
Lead	400	NA	NA	NA	NA	NA
Mercury	61	NA	NA	NA	NA	NA
Nickel	4,100	NA	NA	NA	NA	NA
Selenium	1,000	NA	NA	NA	NA	NA
Silver	1,000	NA	NA	NA	NA	NA
Thallium	160	NA	NA	NA	NA	NA
Zinc	61,000	NA	NA	NA	NA	NA
Total Cyanide	4,100	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.(6) NA Not analyzed.
- (7) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- $(8)\ Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	ind surface)/Concer	ntration
	Screening	SB49-001	SB49B-001	SB50-002	SB50-003	SB51-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	14 - 16	20 - 22	10 -12
		TCL Vola	tiles (mg/kg)			
Acetone	200,000	0.029 U	0.031 U	1.9 U	0.037 UJ	0.03 U
Benzene	2,300	0.0059 U	0.0063 U	2.9	0.0073 UJ	3.7
Bromodichloromethane	2,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Bromoform	16,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Bromomethane	1,000	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
2-Butanone		0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Carbon Disulfide	20,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Carbon Tetrachloride	410	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Chlorobenzene	4,100	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Chloroethane +	82,000	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Chloroform	2,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Chloromethane +	820	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Dibromochloromethane	41,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1-Dichloroethane	200,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,2-Dichloroethane	1,400	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1-Dichloroethene	1,800	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
cis-1,2-Dichloroethene	20,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
trans-1,2-Dichloroethene	41,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,2-Dichloropropane	1,800	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
cis-1,3-Dichloropropene	1,200	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
trans-1,3-Dichloropropene	1,200	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Ethylbenzene	20,000	0.0059 U	0.0063 U	30	0.56	5.8
2-Hexanone +	8,200	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
4-Methyl-2-Pentanone		0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Methylene Chloride	12,000	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Methyl tert-butyl ether	2,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Styrene	41,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1,2,2-Tetrachloroethane +	12,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Tetrachloroethene	2,400	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Toluene	410,000	0.0059 U	0.0063 U	0.38 U	0.018 J	0.0094
1,1,1-Trichloroethane		0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1,2-Trichloroethane	8,200	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Trichloroethene	1,200	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Vinyl Chloride	170	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
m,p-Xylene*	410,000	NA	NA	NA	NA	NA
o-Xylene*	410,000	NA	NA	NA	NA	NA
Xylenes, Total	410,000	0.012 U	0.013 U	21	2.1 Ј	3.9

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) J Indicates an estimated value.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

- (0) * Steening level solamet from Table B. Bolt Telescalation Styles (7) NA Not analyzed.

 (8) * The "total xylenes" screening level was used because it is more conservative.

 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sampla	Location and Dan	th (faat balow grou	nd surface)/Concer	atration
	Screening	SB49-001	SB49B-001	SB50-002	SB50-003	SB51-001
Compound/Analyte	Level (mg/kg)	8 - 10	3B49B-001 14 - 16	3B30-002 14 - 16	20 - 22	10 -12
Compound/Anaryte	Level (Hig/kg)		latiles (mg/kg)	14 - 10	20 - 22	10 -12
Bis(2-chloroethoxy)methane		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
	75	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Bis(2-chloroethyl)ether	4.100	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Bis(2-ethylhexyl)phthalate	4,100					
4-Bromophenyl phenyl ether	410,000	0.42 U 0.42 U	0.41 U 0.41 U	0.46 U 0.46 U	0.45 U	0.44 U
Butyl benzyl phthalate	6.200				0.45 U	0.44 U 4.8
Carbazole	-,	0.42 U	0.41 U	0.46 U	0.45 U	
4-Chloro-3-methylphenol +	41,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4-Chloroaniline	820	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2-Chloronaphthalene		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2-Chlorophenol	10,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4-Chlorophenyl phenyl ether		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Dibenzofuran +	820	0.42 U	0.41 U	1.2	0.45 U	3.4
1,2-Dichlorobenzene	18,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
1,3-Dichlorobenzene +	180	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
1,4-Dichlorobenzene		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
3,3´-Dichlorobenzidine	280	0.84 U	0.82 U	0.91 U	0.89 U	0.87 U
2,4-Dichlorophenol	610	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Diethyl phthalate	1,000,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Dimethyl phthalate +	1,000,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Di-n-butyl phthalate	200,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2,4-Dimethylphenol	41,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4,6-Dinitro-2-methylphenol		2 U	2 U	2.2 U	2.2 U	2.1 U
2,4-Dinitrophenol	410	2 U	2 U	2.2 U	2.2 U	2.1 U
2,4-Dinitrotoluene	180	0.22 U	0.21 U	0.23 U	0.23 U	0.22 U
2,6-Dinitrotoluene	180	0.22 U	0.21 U	0.23 U	0.23 U	0.22 U
Di-n-octyl phthalate	4,100	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Hexachlorobenzene	78	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Hexachlorobutadiene +	41	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Hexachlorocyclopentadiene	14,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Hexachloroethane	2,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Isophorone	410,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2-Methylnaphthalene +	820	0.42 U	0.41 U	7.5	0.45 U	52
2-Methylphenol	100,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4-Methylphenol +	1,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2-Nitroaniline		2 U	2 U	2.2 U	2.2 U	2.1 U
3-Nitroaniline		2 U	2 U	2.2 U	2.2 U	2.1 U
4-Nitroaniline		2 U	2 U	2.2 U	2.2 U	2.1 U
Nitrobenzene	1,000	0.22 U	0.21 U	0.23 U	0.23 U	0.22 U
2-Nitrophenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4-Nitrophenol		2 U	2 U	2.2 U	2.2 U	2.1 U
N-Nitrosodi-n-propylamine	18	0.22 U	0.21 U	0.23 U	0.23 U	0.22 U
N-Nitrosodiphenylamine	25,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2, 2'-Oxybis(1-Chloropropane)		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Pentachlorophenol	520	2 U	2 U	2.2 U	2.2 U	2.1 U
Phenol	120,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
1,2,4-Trichlorobenzene	2,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2,4,5-Trichlorophenol	200,000	0.84 U	0.82 U	0.91 U	0.89 U	0.87 U
2,4,6-Trichlorophenol	11,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \							
	Screening	SB49-001	SB49B-001	SB50-002	SB50-003	SB51-001			
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	14 - 16	20 - 22	10 -12			
		PAHs	(mg/kg)						
Acenaphthene	120,000	0.32	0.031 U	3	0.086	28			
Acenaphthylene +	61,000	0.19	0.031 U	0.44	0.034 U	4.1			
Anthracene	610,000	0.44	0.031 U	2.6	0.18	20			
Benzo(a)anthracene	170	1	0.035	3.9	0.42	17			
Benzo(b)fluoranthene	170	0.78	0.031 U	2.4	0.27	8.2			
Benzo(k)fluoranthene	1,700	0.74	0.032	3.8	0.38	7.4			
Benzo(g,h,i)perylene +	61,000	0.68	0.031 U	0.74	0.077	8			
Benzo(a)pyrene	17	1	0.041	4.4	0.46	16			
Chrysene	17,000	1	0.053	3.1	0.42	17			
Dibenzo(a,h)anthracene	17	0.11	0.031 U	0.24	0.037	1.4			
Fluoranthene	82,000	1.9	0.058	7.2	0.66	36			
Fluorene	82,000	0.24	0.031 U	2.2	0.098	21			
Indeno(1,2,3-cd)pyrene	170	0.55	0.031 U	0.89	0.098	6.2			
Naphthalene	4,100	0.2	0.041	44	0.52	67			
Phenanthrene +	61,000	1.3	0.079	8.7	0.46	78			
Pyrene	61,000	2.1	0.078	6.4	0.55	50			
		PCBs	(mg/kg)						
Aroclor 1016		NA	NA	NA	NA	NA			
Aroclor 1221		NA	NA	NA	NA	NA			
Aroclor 1232		NA	NA	NA	NA	NA			
Aroclor 1242		NA	NA	NA	NA	NA			
Aroclor 1248		NA	NA	NA	NA	NA			
Aroclor 1254		NA	NA	NA	NA	NA			
Aroclor 1260		NA	NA	NA	NA	NA			
Total PCBs	1	NA	NA	NA	NA	NA			
		Pollutant Metals	and Total Cyanide	(mg/kg)					
Antimony	82	NA	NA	NA	NA	NA			
Arsenic	61	NA	NA	NA	NA	NA			
Barium	14,000	NA	NA	NA	NA	NA			
Beryllium	410	NA	NA	NA	NA	NA			
Cadmium	200	NA	NA	NA	NA	NA			
Chromium	4,100	NA	NA	NA	NA	NA			
Copper	8,200	NA	NA	NA	NA	NA			
Lead	400	NA	NA	NA	NA	NA			
Mercury	61	NA	NA	NA	NA	NA			
Nickel	4,100	NA	NA	NA	NA	NA			
Selenium	1,000	NA	NA	NA	NA	NA			
Silver	1,000	NA	NA	NA	NA	NA			
Thallium	160	NA	NA	NA	NA	NA			
Zinc	61,000	NA	NA	NA	NA	NA			
Total Cyanide	4,100	NA	NA	NA	NA	NA			

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

⁽⁵⁾ PCBs - Polychlorinated Biphenyls.(6) NA - Not analyzed.

^{(7) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

 $^{(8)\} Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Table 3 (Continued) Tier 1 Screening: Soil Ingestion Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Sample Location	and Depth (feet be	elow ground surfa	ce)/Concentration	
	Screening	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	Level (mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
		T	CL Volatiles (mg/l	(g)			
Acetone	200,000	0.027 U	1.4 U	0.027 UJ	0.036 U	0.1	0.031 UJ
Benzene	2,300	0.0055 U	2.6	0.0089 J	0.0086	0.21	0.0062 UJ
Bromodichloromethane	2,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Bromoform	16,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Bromomethane	1,000	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
2-Butanone		0.011 U	0.55 U	0.011 UJ	0.015 U	0.023	0.012 UJ
Carbon Disulfide	20,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Carbon Tetrachloride	410	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chlorobenzene	4,100	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chloroethane +	82,000	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
Chloroform	2,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chloromethane +	820	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Dibromochloromethane	41,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1-Dichloroethane	200,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,2-Dichloroethane	1,400	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1-Dichloroethene	1,800	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
cis-1,2-Dichloroethene	20,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
trans-1,2-Dichloroethene	41,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,2-Dichloropropane	1,800	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
cis-1,3-Dichloropropene	1,200	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
trans-1,3-Dichloropropene	1,200	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Ethylbenzene	20,000	0.0055 U	11	0.043 J	0.0073 U	1.2	0.0062 UJ
2-Hexanone +	8,200	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
4-Methyl-2-Pentanone		0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
Methylene Chloride	12,000	0.011 U	0.55 U	0.011 UJ	0.018	0.035	0.026 J
Methyl tert-butyl ether	2,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Styrene	41,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1,2,2-Tetrachloroethane +	12,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Tetrachloroethene	2,400	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Toluene	410,000	0.0055 U	0.7	0.0097 J	0.0073 U	0.013	0.0062 UJ
1,1,1-Trichloroethane		0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1,2-Trichloroethane	8,200	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Trichloroethene	1,200	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Vinyl Chloride	170	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
m,p-Xylene*	410,000	NA	NA	NA	NA	NA	NA
o-Xylene*	410,000	NA	NA	NA	NA	NA	NA
Xylenes, Total	410,000	0.024	9.8	0.055 J	0.015 U	1.7	0.012 UJ

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) J Indicates an estimated value.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1		Sample Location	and Depth (feet be	elow ground surface	ce)/Concentration	
	Screening	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	Level (mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
	<u>, </u>	TCI	Semivolatiles (m	g/kg)			
Bis(2-chloroethoxy)methane		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Bis(2-chloroethyl)ether	75	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Bis(2-ethylhexyl)phthalate	4,100	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Bromophenyl phenyl ether		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Butyl benzyl phthalate	410,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Carbazole	6,200	0.41 U	0.4 U	0.39 U	0.41 U	5.1	0.4 U
4-Chloro-3-methylphenol +	41,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Chloroaniline	820	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Chloronaphthalene		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Chlorophenol	10,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Chlorophenyl phenyl ether		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Dibenzofuran +	820	0.82	0.91	0.39 U	0.41 U	4.9	0.4 U
1,2-Dichlorobenzene	18,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,3-Dichlorobenzene +	180	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,4-Dichlorobenzene		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
3,3'-Dichlorobenzidine	280	0.82 U	0.8 U	0.77 U	0.82 U	0.85 U	0.8 U
2,4-Dichlorophenol	610	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Diethyl phthalate	1,000,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Dimethyl phthalate +	1,000,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Di-n-butyl phthalate	200,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2,4-Dimethylphenol	41,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
2,4-Dinitrophenol	410	2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
2,4-Dinitrotoluene	180	0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
2,6-Dinitrotoluene	180	0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
Di-n-octyl phthalate	4,100	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorobenzene	78	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorobutadiene +	41	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorocyclopentadiene	14,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachloroethane	2,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Isophorone	410,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Methylnaphthalene +	820	4.5	19	1.8	0.41 U	37	0.4 U
2-Methylphenol	100,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Methylphenol +	1,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
3-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
4-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
Nitrobenzene	1,000	0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
2-Nitrophenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Nitrophenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
N-Nitrosodi-n-propylamine	18	0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
N-Nitrosodiphenylamine	25,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2, 2'-Oxybis(1-Chloropropane)		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Pentachlorophenol	520	2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
Phenol	120,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,2,4-Trichlorobenzene	2,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2,4,5-Trichlorophenol	200,000	0.82 U	0.8 U	0.77 U	0.82 U	0.85 U	0.8 U
2,4,6-Trichlorophenol	11,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 3 (Continued)

Tier 1 Screening: Soil Ingestion Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration										
	Screening	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003				
Compound/Analyte	Level (mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20				
	<u> </u>		PAHs (mg/kg)								
Acenaphthene	120,000	2.4	3.7	0.19	2	16	0.11				
Acenaphthylene +	61,000	0.47	1	0.066	1.6	2.4	0.046				
Anthracene	610,000	2.2	2.2	0.12	2.6	16	0.12				
Benzo(a)anthracene	170	2.3	1.8	0.091	5.2	14	0.12				
Benzo(b)fluoranthene	170	1.2	0.71	0.038	1.4	6.4	0.054				
Benzo(k)fluoranthene	1,700	1.1	0.31	0.035	1.8	6.5	0.076				
Benzo(g,h,i)perylene +	61,000	0.57	0.18	0.029 U	1	1.6	0.042				
Benzo(a)pyrene	17	1.7	1.3	0.07	4.8	11	0.099				
Chrysene	17,000	2	1.7	0.096	6.8	15	0.14				
Dibenzo(a,h)anthracene	17	0.11	0.1	0.029 U	0.5	1.2	0.03 U				
Fluoranthene	82,000	3.7	2.7	0.15	7.8	24	0.22				
Fluorene	82,000	2.5	3.6	0.2	4	19	0.13				
Indeno(1,2,3-cd)pyrene	170	0.59	0.35	0.029 U	0.92	1.8	0.031				
Naphthalene	4,100	6.1	22	2.3	1.5	41	0.24				
Phenanthrene +	61,000	7.6	11	0.65	14	57	0.48				
Pyrene	61,000	4.2	4.5	0.22	12	27	0.27				
PCBs (mg/kg)											
Aroclor 1016		NA	NA	NA	NA	NA	NA				
Aroclor 1221		NA	NA	NA	NA	NA	NA				
Aroclor 1232		NA	NA	NA	NA	NA	NA				
Aroclor 1242		NA	NA	NA	NA	NA	NA				
Aroclor 1248		NA	NA	NA	NA	NA	NA				
Aroclor 1254		NA	NA	NA	NA	NA	NA				
Aroclor 1260		NA	NA	NA	NA	NA	NA				
Total PCBs	1	NA	NA	NA	NA	NA	NA				
			t Metals and Total	Cyanide (mg/kg)							
Antimony	82	NA	NA	NA	NA	NA	NA				
Arsenic	61	NA	NA	NA	NA	NA	NA				
Barium	14,000	NA	NA	NA	NA	NA	NA				
Beryllium	410	NA	NA	NA	NA	NA	NA				
Cadmium	200	NA	NA	NA	NA	NA	NA				
Chromium	4,100	NA	NA	NA	NA	NA	NA				
Copper	8,200	NA	NA	NA	NA	NA	NA				
Lead	400	NA	NA	NA	NA	NA	NA				
Mercury	61	NA	NA	NA	NA	NA	NA				
Nickel	4,100	NA	NA	NA	NA	NA	NA				
Selenium	1,000	NA	NA	NA	NA	NA	NA				
Silver	1,000	NA	NA	NA	NA	NA	NA				
Thallium	160	NA	NA	NA	NA	NA	NA				
Zinc	61,000	NA	NA	NA	NA	NA	NA				
Total Cyanide	4,100	NA	NA	NA	NA	NA	NA				

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

⁽⁵⁾ PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ NA - Not analyzed.

 $^{(7) +} Screening \ level \ obtained \ from \ Table \ B: Soil \ Remediation \ Objectives \ for \ Industrial/Commercial \ Properties, Non-TACO \ Chemicals \ (Illinois \ EPA \ 2004).$

 $^{(8) \} Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) \\ identified \ as \ source \ material \ are \ not \ included \ in \ the \ TACO \ Tier\ 1 \ evaluation.$

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

,	Tier 1	Sample	Location and Dep	th (feet below grou	and surface)/Conce	entration
	Screening	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20
		TCL Volat	iles (mg/kg)			
Acetone	200,000	3.2 U	0.027 U	0.026	0.032 U	0.028 U
Benzene	2,300	5.7	0.0054 U	0.064	0.0064 U	0.0056 U
Bromodichloromethane	2,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Bromoform	16,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Bromomethane	1,000	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
2-Butanone		1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Carbon Disulfide	20,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Carbon Tetrachloride	410	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Chlorobenzene	4,100	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Chloroethane +	82,000	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Chloroform	2,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Chloromethane +	820	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Dibromochloromethane	41,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,1-Dichloroethane	200,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,2-Dichloroethane	1,400	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,1-Dichloroethene	1,800	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
cis-1,2-Dichloroethene	20,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
trans-1,2-Dichloroethene	41,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,2-Dichloropropane	1,800	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
cis-1,3-Dichloropropene	1,200	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
trans-1,3-Dichloropropene	1,200	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Ethylbenzene	20,000	25	0.0054 U	0.11	0.0064 U	0.0056 U
2-Hexanone +	8,200	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
4-Methyl-2-Pentanone		1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Methylene Chloride	12,000	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Methyl tert-butyl ether	2,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Styrene	41,000	0.64 U	0.0054 U	0.016	0.0064 U	0.0056 U
1,1,2,2-Tetrachloroethane +	12,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Tetrachloroethene	2,400	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Toluene	410,000	0.84	0.0054 U	0.066	0.0064 U	0.0056 U
1,1,1-Trichloroethane		0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,1,2-Trichloroethane	8,200	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Trichloroethene	1,200	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Vinyl Chloride	170	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
m,p-Xylene*	410,000	NA	NA	NA	NA	NA
o-Xylene*	410,000	NA	NA	NA	NA	NA
Xylenes, Total	410,000	8.7	0.011 U	0.18	0.013 U	0.011 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Bis(2-chloroethyl)ether 75 0.42 U 0.4 U 0.39 U 0 Bis(2-ethylhexyl)phthalate 4,100 0.42 U 0.4 U 0.39 U 0 4-Bromophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 Butyl benzyl phthalate 410,000 0.42 U 0.4 U 0.39 U 0 Carbazole 6,200 0.51 0.4 U 0.39 U 0 4-Chloro-3-methylphenol + 41,000 0.42 U 0.4 U 0.39 U 0 4-Chloroaniline 820 0.42 U 0.4 U 0.39 U 0 2-Chloronaphthalene 0.42 U 0.4 U 0.39 U 0 2-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0 4-Chlorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 4-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0 4-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0 <td< th=""><th>3002 SB56-00 14 18 - 20 4 U 0.4 3 U 0.81</th></td<>	3002 SB56-00 14 18 - 20 4 U 0.4 3 U 0.81
Compound/Analyte Level (mg/kg) 8 - 10 14 - 16 6 - 8 12 - TCL Semivolatiles (mg/kg) Bis(2-chloroethoxy)methane 0.42 U 0.4 U 0.39 U 0 Bis(2-chloroethyl)ether 75 0.42 U 0.4 U 0.39 U 0 Bis(2-ethylhexyl)phthalate 4,100 0.42 U 0.4 U 0.39 U 0 4-Bromophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 Butyl benzyl phthalate 410,000 0.42 U 0.4 U 0.39 U 0 Carbazole 6,200 0.51 0.4 U 0.39 U 0 4-Chloro-3-methylphenol + 41,000 0.42 U 0.4 U 0.39 U 0 4-Chloroaniline 820 0.42 U 0.4 U 0.39 U 0 2-Chloronaphthalene 0.42 U 0.4 U 0.39 U 0 2-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0 4-Chlorophenyl phenyl ether 0.42 U	14
TCL Semivolatiles (mg/kg)	4 U 0.4 6 U 0.4
Bis(2-chloroethoxy)methane	.4 U 0.4 .5 U 0.81
Bis(2-chloroethyl)ether 75 0.42 U 0.4 U 0.39 U 0 Bis(2-ethylhexyl)phthalate 4,100 0.42 U 0.4 U 0.39 U 0 4-Bromophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 Butyl benzyl phthalate 410,000 0.42 U 0.4 U 0.39 U 0 Carbazole 6,200 0.51 0.4 U 0.39 U 0 4-Chloro-3-methylphenol + 41,000 0.42 U 0.4 U 0.39 U 0 4-Chloroaniline 820 0.42 U 0.4 U 0.39 U 0 2-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0 2-Chlorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 2-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0 4-Chlorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 Dibenzofuran + 820 1.9 0.4 U 0.39 U 0 <	.4 U 0.4 .5 U 0.81
Bis(2-ethylhexyl)phthalate 4,100 0.42 U 0.4 U 0.39 U 0 4-Bromophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 Butyl benzyl phthalate 410,000 0.42 U 0.4 U 0.39 U 0 Carbazole 6,200 0.51 0.4 U 0.39 U 0 4-Chloro-3-methylphenol + 41,000 0.42 U 0.4 U 0.39 U 0 4-Chloroaniline 820 0.42 U 0.4 U 0.39 U 0 2-Chloronaphthalene 0.42 U 0.4 U 0.39 U 0 2-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0 4-Chlorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 10-biorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 1-2-Dichlorobenzene 18,000 0.42 U 0.4 U 0.39 U 0 1,3-Dichlorobenzene 0.42 U 0.4 U 0.39 U 0	.4 U 0.4 .5 U 0.81
4-Bromophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 Butyl benzyl phthalate 410,000 0.42 U 0.4 U 0.39 U 0 Carbazole 6,200 0.51 0.4 U 0.39 U 0 4-Chloro-3-methylphenol + 41,000 0.42 U 0.4 U 0.39 U 0 4-Chloroaniline 820 0.42 U 0.4 U 0.39 U 0 2-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0 4-Chlorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 4-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0 1-Chlorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 Dibenzofuran + 820 1.9 0.4 U 0.39 U 0 1,2-Dichlorobenzene 18,000 0.42 U 0.4 U 0.39 U 0 1,3-Dichlorobenzene 0.42 U 0.4 U 0.39 U 0 1,4-Dic	.4 U 0.4 .4 U 0.4
Butyl benzyl phthalate 410,000 0.42 U 0.4 U 0.39 U 0 Carbazole 6,200 0.51 0.4 U 0.39 U 0 4-Chloro-3-methylphenol + 41,000 0.42 U 0.4 U 0.39 U 0 4-Chloroaniline 820 0.42 U 0.4 U 0.39 U 0 2-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0 4-Chlorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 4-Chlorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 Dibenzofuran + 820 1.9 0.4 U 0.39 U 0 1,2-Dichlorobenzene 18,000 0.42 U 0.4 U 0.39 U 0 1,3-Dichlorobenzene + 180 0.42 U 0.4 U 0.39 U 0 1,4-Dichlorobenzene 0.42 U 0.4 U 0.39 U 0	.4 U 0.4 .5 U 0.81
Carbazole 6,200 0.51 0.4 U 0.39 U 0 4-Chloro-3-methylphenol + 41,000 0.42 U 0.4 U 0.39 U 0 4-Chloroaniline 820 0.42 U 0.4 U 0.39 U 0 2-Chloronaphthalene 0.42 U 0.4 U 0.39 U 0 2-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0 4-Chlorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 Dibenzofuran + 820 1.9 0.4 U 0.39 U 0 1,2-Dichlorobenzene 18,000 0.42 U 0.4 U 0.39 U 0 1,3-Dichlorobenzene + 180 0.42 U 0.4 U 0.39 U 0 1,4-Dichlorobenzene 0.42 U 0.4 U 0.39 U 0	4 U 0.4 4 U 0.4 6 U 0.4 6 U 0.4 6 U 0.4 7 U 0.4 8 U 0.4 8 U 0.4 8 U 0.4 8 U 0.4 9 U
4-Chloro-3-methylphenol + 41,000 0.42 U 0.4 U 0.39 U 0 4-Chloroaniline 820 0.42 U 0.4 U 0.39 U 0 2-Chloronaphthalene 0.42 U 0.4 U 0.39 U 0 2-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0 4-Chlorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 Dibenzofuran + 820 1.9 0.4 U 0.39 U 0 1,2-Dichlorobenzene 18,000 0.42 U 0.4 U 0.39 U 0 1,3-Dichlorobenzene + 180 0.42 U 0.4 U 0.39 U 0 1,4-Dichlorobenzene 0.42 U 0.4 U 0.39 U 0	4 U 0.4 4 U 0.4 1 U 0.4
4-Chloroaniline 820 0.42 U 0.4 U 0.39 U 0 2-Chloronaphthalene 0.42 U 0.4 U 0.39 U 0 2-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0 4-Chlorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 Dibenzofuran + 820 1.9 0.4 U 0.39 U 0 1,2-Dichlorobenzene 18,000 0.42 U 0.4 U 0.39 U 0 1,3-Dichlorobenzene + 180 0.42 U 0.4 U 0.39 U 0 1,4-Dichlorobenzene 0.42 U 0.4 U 0.39 U 0	.4 U 0.4 .3 U 0.81
2-Chloronaphthalene 0.42 U 0.4 U 0.39 U 0.2 Chlorophenol 2-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0.4 U 4-Chlorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0.0 Dibenzofuran + 820 1.9 0.4 U 0.39 U 0.0 Dibenzofuran + 0.42 U 0.4 U 0.39 U 0.0 Dibenzofuran + 0.42 U 0.4 U 0.39 U 0.0 Dibenzofuran + 0.42 U 0.4 U 0.39 U 0.0 Dibenzofuran + 0.42 U 0.4 U 0.39 U 0.0 Dibenzofuran + 0.42 U 0.4 U 0.39 U 0.0 Dibenzofuran + 0.42 U 0.4 U 0.39 U 0.0 Dibenzofuran + 0.42 U 0.4 U 0.39 U 0.0 Dibenzofuran + 0.42 U 0.4 U 0.39 U 0.0 Dibenzofuran + 0.42 U 0.4 U 0.39 U 0.0 Dibenzofuran + 0.42 U 0.4 U 0.39 U 0.0 Dibenzofuran + 0.42 U 0.4 U 0.39 U 0.0 Dibenzofuran + 0.0 Dibenzofuran + 0.42 U 0.4 U 0.39 U 0.0 Dibenzofuran + 0.0 Dibenzofuran + 0.0 Dibenzofuran + </td <td>.4 U 0.4 .4 U 0.4</td>	.4 U 0.4 .4 U 0.4
2-Chlorophenol 10,000 0.42 U 0.4 U 0.39 U 0 4-Chlorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 Dibenzofuran + 820 1.9 0.4 U 0.39 U 0 1,2-Dichlorobenzene 18,000 0.42 U 0.4 U 0.39 U 0 1,3-Dichlorobenzene + 180 0.42 U 0.4 U 0.39 U 0 1,4-Dichlorobenzene 0.42 U 0.4 U 0.39 U 0	.4 U 0.4 .3 U 0.81
4-Chlorophenyl phenyl ether 0.42 U 0.4 U 0.39 U 0 Dibenzofuran + 820 1.9 0.4 U 0.39 U 0 1,2-Dichlorobenzene 18,000 0.42 U 0.4 U 0.39 U 0 1,3-Dichlorobenzene + 180 0.42 U 0.4 U 0.39 U 0 1,4-Dichlorobenzene 0.42 U 0.4 U 0.39 U 0	4 U 0.4 4 U 0.4 4 U 0.4 4 U 0.4 4 U 0.4 4 U 0.4 31 U 0.81
Dibenzofuran + 820 1.9 0.4 U 0.39 U 0 1,2-Dichlorobenzene 18,000 0.42 U 0.4 U 0.39 U 0 1,3-Dichlorobenzene + 180 0.42 U 0.4 U 0.39 U 0 1,4-Dichlorobenzene 0.42 U 0.4 U 0.39 U 0	.4 U 0.4 .4 U 0.4 .4 U 0.4 .4 U 0.4 .4 U 0.4 .81 U 0.81
1,2-Dichlorobenzene 18,000 0.42 U 0.4 U 0.39 U 0.1,3-Dichlorobenzene 1,3-Dichlorobenzene 180 0.42 U 0.4 U 0.39 U 0.00 1,4-Dichlorobenzene 0.42 U 0.4 U 0.39 U 0.00	.4 U 0.4 .4 U 0.4 .4 U 0.4 .81 U 0.81
1,3-Dichlorobenzene + 180 0.42 U 0.4 U 0.39 U 0.14 U 1,4-Dichlorobenzene 0.42 U 0.4 U 0.39 U 0.00 U	.4 U 0.4 .4 U 0.4 31 U 0.81
1,4-Dichlorobenzene 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4 81 U 0.81
	81 U 0.81
2.0/ P: 11 1 : 1: 200 0.04 Y 0.70 Y 0.70 Y	
3,3´-Dichlorobenzidine 280 0.84 U 0.79 U 0.79 U 0.8	
2,4-Dichlorophenol 610 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
Diethyl phthalate 1,000,000 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
Dimethyl phthalate + 1,000,000 0.42 U 0.4 U 0.39 U 0.40 U 0.4	.4 U 0.4
Di-n-butyl phthalate 200,000 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
2,4-Dimethylphenol 41,000 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
4,6-Dinitro-2-methylphenol 2 U 1.9 U 1.9 U	2 U 2
2,4-Dinitrophenol 410 2 U 1.9 U 1.9 U	2 U 2
2,4-Dinitrotoluene 180 0.22 U 0.2 U 0.2 U 0.2	21 U 0.21
2,6-Dinitrotoluene 180 0.22 U 0.2 U 0.2 U 0.2	21 U 0.21
Di-n-octyl phthalate 4,100 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
Hexachlorobenzene 78 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
Hexachlorobutadiene + 41 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
Hexachlorocyclopentadiene 14,000 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
Hexachloroethane 2,000 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
Isophorone 410,000 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
2-Methylnaphthalene + 820 45 0.4 U 0.8 0.	.4 U 0.4
2-Methylphenol 100,000 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
4-Methylphenol + 1,000 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
2-Nitroaniline 2 U 1.9 U 1.9 U	2 U 2
3-Nitroaniline 2 U 1.9 U 1.9 U	2 U 2
4-Nitroaniline 2 U 1.9 U 1.9 U	2 U 2
	21 U 0.21
	.4 U 0.4
	2 U 2
N-Nitrosodi-n-propylamine 18 0.22 U 0.2 U 0.2 U 0.2	21 U 0.21
N-Nitrosodiphenylamine 25,000 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
2, 2'-Oxybis(1-Chloropropane) 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
Pentachlorophenol 520 2 U 1.9 U 1.9 U	2 U 2
Phenol 120,000 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
1,2,4-Trichlorobenzene 2,000 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4
2,4,5-Trichlorophenol 200,000 0.84 U 0.79 U 0.79 U 0.8	31 U 0.81
2,4,6-Trichlorophenol 11,000 0.42 U 0.4 U 0.39 U 0.	.4 U 0.4

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration									
	Screening	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001			
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20			
•		PAHs	(mg/kg)			-			
Acenaphthene	120,000	12	0.046	0.078	0.03 U	0.031 U			
Acenaphthylene +	61,000	4	0.03 U	0.089	0.03 U	0.031 U			
Anthracene	610,000	7.4	0.046	0.099	0.03 U	0.031 U			
Benzo(a)anthracene	170	5.4	0.037	0.098	0.03 U	0.031 U			
Benzo(b)fluoranthene	170	2.6	0.03 U	0.054	0.03 U	0.031 U			
Benzo(k)fluoranthene	1,700	2.1	0.03 U	0.05	0.03 U	0.031 U			
Benzo(g,h,i)perylene +	61,000	1.8	0.03 U	0.033	0.03 U	0.031 U			
Benzo(a)pyrene	17	4.8	0.034	0.092	0.03 U	0.031 U			
Chrysene	17,000	5.3	0.045	0.1	0.03 U	0.031 U			
Dibenzo(a,h)anthracene	17	0.6	0.03 U	0.029 U	0.03 U	0.031 U			
Fluoranthene	82,000	9.6	0.062	0.16	0.03 U	0.031 U			
Fluorene	82,000	9.3	0.049	0.15	0.03 U	0.031 U			
Indeno(1,2,3-cd)pyrene	170	1.6	0.03 U	0.029 U	0.03 U	0.031 U			
Naphthalene	4,100	110	0.26	0.95	0.03 U	0.031 U			
Phenanthrene +	61,000	27	0.15	0.58	0.067	0.037			
Pyrene	61,000	14	0.095	0.31	0.03 U	0.031 U			
		PCBs	(mg/kg)						
Aroclor 1016		NA	NA	NA	NA	NA			
Aroclor 1221		NA	NA	NA	NA	NA			
Aroclor 1232		NA	NA	NA	NA	NA			
Aroclor 1242		NA	NA	NA	NA	NA			
Aroclor 1248		NA	NA	NA	NA	NA			
Aroclor 1254		NA	NA	NA	NA	NA			
Aroclor 1260		NA	NA	NA	NA	NA			
Total PCBs	1	NA	NA	NA	NA	NA			
	· · · · · · · · · · · · · · · · · · ·		and Total Cyanide	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					
Antimony	82	NA	NA	NA	NA	NA			
Arsenic	61	NA	NA	NA	NA	NA			
Barium	14,000	NA	NA	NA	NA	NA			
Beryllium	410	NA	NA	NA	NA	NA			
Cadmium	200	NA	NA	NA	NA	NA			
Chromium	4,100	NA	NA	NA	NA	NA			
Copper	8,200	NA	NA	NA	NA	NA			
Lead	400	NA	NA	NA	NA	NA			
Mercury	61	NA	NA	NA	NA	NA			
Nickel	4,100	NA	NA	NA	NA	NA			
Selenium	1,000	NA	NA	NA	NA	NA			
Silver	1,000	NA	NA	NA	NA	NA			
Thallium	160	NA	NA	NA	NA	NA			
Zinc	61,000	NA	NA	NA	NA	NA			
Total Cyanide	4,100	NA	NA	NA	NA	NA			

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (4) -- Toxicity Citeria not available for(5) PCBs Polychlorinated Biphenyls.(6) NA Not analyzed.
- (7) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- $(8)\ Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	nd surface)/Conce	ntration
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18
		TCL Vola	tiles (mg/kg)			
Acetone	200,000	0.028 U	0.047 U	0.031 UJ	0.028 U	0.033 U
Benzene	2,300	0.0057 U	0.0094 U	0.0061 UJ	0.031	0.0067 U
Bromodichloromethane	2,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Bromoform	16,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Bromomethane	1,000	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
2-Butanone		0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
Carbon Disulfide	20,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Carbon Tetrachloride	410	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Chlorobenzene	4,100	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Chloroethane +	82,000	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
Chloroform	2,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Chloromethane +	820	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Dibromochloromethane	41,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1-Dichloroethane	200,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,2-Dichloroethane	1,400	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1-Dichloroethene	1,800	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
cis-1,2-Dichloroethene	20,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
trans-1,2-Dichloroethene	41,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,2-Dichloropropane	1,800	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
cis-1,3-Dichloropropene	1,200	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
trans-1,3-Dichloropropene	1,200	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Ethylbenzene	20,000	0.0057 U	0.0094 U	0.0061 UJ	0.071	0.0067 U
2-Hexanone +	8,200	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
4-Methyl-2-Pentanone		0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
Methylene Chloride	12,000	0.011 U	0.019 U	0.012 UJ	0.017	0.016
Methyl tert-butyl ether	2,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Styrene	41,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1,2,2-Tetrachloroethane +	12,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Tetrachloroethene	2,400	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Toluene	410,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1,1-Trichloroethane		0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1,2-Trichloroethane	8,200	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Trichloroethene	1,200	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Vinyl Chloride	170	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
m,p-Xylene*	410,000	NA	NA	NA	NA	NA
o-Xylene*	410,000	NA	NA	NA	NA	NA
Xylenes, Total	410,000	0.011 U	0.019 U	0.012 UJ	0.044	0.013 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) J Indicates an estimated value.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

- (0) * Steeling is considered from Table B. Bolt Netherlands of Section 1. A. Not analyzed.

 (8) * The "total xylenes" screening level was used because it is more conservative.

 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Den	th (feet below grou	nd surface)/Concer	ntration
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18
Compound/Anaryte	Level (Hig/kg)		latiles (mg/kg)	10 - 16	0-8	10 - 16
Bis(2-chloroethoxy)methane		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Bis(2-chloroethyl)ether	75	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Bis(2-ethylhexyl)phthalate	4.100	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4-Bromophenyl phenyl ether	4,100	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Butyl benzyl phthalate	410.000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Carbazole	6,200	0.39 U	6.8	0.41 U	0.39 U	0.38 U
4-Chloro-3-methylphenol +	41,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4-Chloroaniline	820	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2-Chloronaphthalene		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2-Chlorophenol	10,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4-Chlorophenyl phenyl ether	10,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Dibenzofuran +	820	0.39 U	4.6	0.41 U	0.39 U	0.38 U
1,2-Dichlorobenzene	18,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
1.3-Dichlorobenzene +	180	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
1,4-Dichlorobenzene		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
3,3´-Dichlorobenzidine	280	0.79 U	1.1 U	0.41 U	0.78 U	0.75 U
2,4-Dichlorophenol	610	0.79 U	0.54 U	0.41 U	0.39 U	0.75 U
Diethyl phthalate	1.000,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Dimethyl phthalate +	1,000,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Di-n-butyl phthalate	200,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2,4-Dimethylphenol	41,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4,6-Dinitro-2-methylphenol	41,000	1.9 U	2.6 U	2 U	1.9 U	1.8 U
2,4-Dinitrophenol	410	1.9 U	2.6 U	2 U	1.9 U	1.8 U
2,4-Dinitrophenol	180	0.2 U	0.28 U	0.21 U	0.2 U	0.19 U
2,6-Dinitrotoluene	180	0.2 U	0.28 U	0.21 U	0.2 U	0.19 U
Di-n-octyl phthalate	4,100	0.2 U	0.54 U	0.41 U	0.39 U	0.38 U
Hexachlorobenzene	78	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Hexachlorobutadiene +	41	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Hexachlorocyclopentadiene	14,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Hexachloroethane	2,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Isophorone	410,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2-Methylnaphthalene +	820	0.39 U	3.8	0.41 U	0.39 U	0.38 U
2-Methylphenol	100,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4-Methylphenol +	1,000	0.39 U	2.2	0.41 U	0.39 U	0.38 U
2-Nitroaniline		1.9 U	2.6 U	2 U	1.9 U	1.8 U
3-Nitroaniline		1.9 U	2.6 U	2 U	1.9 U	1.8 U
4-Nitroaniline		1.9 U	2.6 U	2 U	1.9 U	1.8 U
Nitrobenzene	1,000	0.2 U	0.28 U	0.21 U	0.2 U	0.19 U
2-Nitrophenol		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4-Nitrophenol		1.9 U	2.6 U	2 U	1.9 U	1.8 U
N-Nitrosodi-n-propylamine	18	0.2 U	0.28 U	0.21 U	0.2 U	0.19 U
N-Nitrosodiphenylamine	25,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2, 2'-Oxybis(1-Chloropropane)		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Pentachlorophenol	520	1.9 U	2.6 U	2 U	1.9 U	1.8 U
Phenol	120,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
1,2,4-Trichlorobenzene	2,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2,4,5-Trichlorophenol	200,000	0.79 U	1.1 U	0.82 U	0.78 U	0.75 U
2,4,6-Trichlorophenol	11,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
-, ·, ·emorophenor	11,000	0.07 0	0.0.0	01	0.07 0	

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration								
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002		
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18		
		PAHs	(mg/kg)	•	•	•		
Acenaphthene	120,000	0.03 U	4.3	0.072	0.029 U	0.028 U		
Acenaphthylene +	61,000	0.03 U	0.45	0.031 U	0.029 U	0.028 U		
Anthracene	610,000	0.03 U	11	0.079	0.029 U	0.028 U		
Benzo(a)anthracene	170	0.03 U	14	0.065	0.029 U	0.028 U		
Benzo(b)fluoranthene	170	0.03 U	8.5	0.038	0.029 U	0.028 U		
Benzo(k)fluoranthene	1,700	0.03 U	9.8	0.038	0.029 U	0.028 U		
Benzo(g,h,i)perylene +	61,000	0.03 U	3.2	0.031 U	0.029 U	0.028 U		
Benzo(a)pyrene	17	0.03 U	12	0.059	0.029 U	0.028 U		
Chrysene	17,000	0.037	12	0.061	0.029	0.028 U		
Dibenzo(a,h)anthracene	17	0.03 U	1.6	0.031 U	0.029 U	0.028 U		
Fluoranthene	82,000	0.056	27	0.14	0.029	0.028 U		
Fluorene	82,000	0.03 U	6.2	0.088	0.029 U	0.028 U		
Indeno(1,2,3-cd)pyrene	170	0.03 U	3.8	0.031 U	0.029 U	0.028 U		
Naphthalene	4,100	0.054	4	0.39	0.087	0.028 U		
Phenanthrene +	61,000	0.11	27	0.24	0.089	0.075		
Pyrene	61,000	0.057	23	0.11	0.05	0.028 U		
		PCBs	(mg/kg)					
Aroclor 1016		NA	NA	NA	NA	NA		
Aroclor 1221		NA	NA	NA	NA	NA		
Aroclor 1232		NA	NA	NA	NA	NA		
Aroclor 1242		NA	NA	NA	NA	NA		
Aroclor 1248		NA	NA	NA	NA	NA		
Aroclor 1254		NA	NA	NA	NA	NA		
Aroclor 1260		NA	NA	NA	NA	NA		
Total PCBs	1	NA	NA	NA	NA	NA		
		Pollutant Metals	and Total Cyanide	(mg/kg)				
Antimony	82	NA	NA	NA	NA	NA		
Arsenic	61	NA	NA	NA	NA	NA		
Barium	14,000	NA	NA	NA	NA	NA		
Beryllium	410	NA	NA	NA	NA	NA		
Cadmium	200	NA	NA	NA	NA	NA		
Chromium	4,100	NA	NA	NA	NA	NA		
Copper	8,200	NA	NA	NA	NA	NA		
Lead	400	NA	NA	NA	NA	NA		
Mercury	61	NA	NA	NA	NA	NA		
Nickel	4,100	NA	NA	NA	NA	NA		
Selenium	1,000	NA	NA	NA	NA	NA		
Silver	1,000	NA	NA	NA	NA	NA		
Thallium	160	NA	NA	NA	NA	NA		
Zinc	61,000	NA	NA	NA	NA	NA		
Total Cyanide	4,100	NA	NA	NA	NA	NA		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.(6) NA Not analyzed.
- (7) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- $(8)\ Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Table 4 Tier 1 Screening: Soil Inhalation Exposure Route Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			th (feet below grou		
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.099	0.041 U	0.17	0.091	0.051
Benzene	0.8	0.0097 U	0.0082 U	0.055	0.015	0.0072 U
Bromodichloromethane	3,000	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Bromoform	53	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Bromomethane	10	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
2-Butanone		0.019 U	0.016 U	0.024 U	0.02	0.014 U
Carbon Disulfide	720	0.0097 U	0.0082 U	0.023	0.0081 U	0.0072 U
Carbon Tetrachloride	0.3	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chlorobenzene	130	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chloroethane +	1,500	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
Chloroform	0.3	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chloromethane +	110	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Dibromochloromethane	1,300	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1-Dichloroethane	1,300	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,2-Dichloroethane	0.4	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1-Dichloroethene	1,500	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
cis-1,2-Dichloroethene	1,200	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
trans-1,2-Dichloroethene	3,100	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,2-Dichloropropane	15	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
cis-1,3-Dichloropropene	1.1	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
trans-1,3-Dichloropropene	1.1	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Ethylbenzene	400	0.0097 U	0.0082 U	0.044	0.049	0.0072 U
2-Hexanone +	70	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
4-Methyl-2-Pentanone		0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
Methylene Chloride	13	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1,2,2-Tetrachloroethane +	2,000	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Tetrachloroethene	11	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Toluene	650	0.0097 U	0.0082 U	0.036	0.0081 U	0.0072 U
1,1,1-Trichloroethane	1,200	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1,2-Trichloroethane	1,800	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Trichloroethene	5	0.0097 U	0.0082 U	0.021	0.0081 U	0.0072 U
Vinyl Chloride	0.28	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
m,p-Xylene*	320	0.0097 U	0.0082 U	0.028	0.0081 U	0.0072 U
o-Xylene*	320	0.0097 U	0.0082 U	0.025	0.012	0.0096
Xylenes, Total	320	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram. (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- $(8) \ Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)\\$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dept	h (feet below grou		entration
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3
		TCL Semivol	latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Bis(2-chloroethyl)ether **	0.2	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Bis(2-ethylhexyl)phthalate	31,000	0.37 U	0.45	0.37 U	0.38 U	0.49
4-Bromophenyl phenyl ether		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Butyl benzyl phthalate	930	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Carbazole		0.37 U	0.38 U	0.52	0.47	2.9
4-Chloro-3-methylphenol		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
4-Chloroaniline		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2-Chloronaphthalene		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2-Chlorophenol	53,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
4-Chlorophenyl phenyl ether		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Dibenzofuran		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
1,2-Dichlorobenzene	560	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
1,3-Dichlorobenzene +	570	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
1,4-Dichlorobenzene	11,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
3,3´-Dichlorobenzidine		0.74 U	0.76 U	0.75 U	0.75 U	0.71 U
2,4-Dichlorophenol		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Diethyl phthalate	2,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Dimethyl phthalate +	1,300	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Di-n-butyl phthalate	2,300	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2,4-Dimethylphenol		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
4,6-Dinitro-2-methylphenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
2,4-Dinitrophenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
2,4-Dinitrotoluene		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2,6-Dinitrotoluene		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Di-n-octyl phthalate	10,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Hexachlorobenzene	1	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Hexachlorobutadiene +	1,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Hexachlorocyclopentadiene	10	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Hexachloroethane		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
Isophorone	4,600	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2-Methylnaphthalene		0.37 U	0.38 U	0.85	0.38 U	0.57
2-Methylphenol		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
4-Methylphenol		0.37 U	0.38 U	0.56	0.38 U	0.36 U
2-Nitroaniline +	73	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
3-Nitroaniline		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
4-Nitroaniline		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
Nitrobenzene	92	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2-Nitrophenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
4-Nitrophenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
N-Nitrosodi-n-propylamine		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
N-Nitrosodiphenylamine		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.016 U	0.016 U	0.015 U
Pentachlorophenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U
Phenol		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
1,2,4-Trichlorobenzene	3,200	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U
2,4,5-Trichlorophenol		0.74 U	0.76 U	0.75 U	0.75 U	0.71 U
2,4,6-Trichlorophenol	200	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample I	Location and Dept	h (feet below grou	nd surface)/Conce	entration
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3
		PAHs (mg/kg)			
Acenaphthene		0.037	0.029 U	0.45	0.19	0.69
Acenaphthylene		0.032	0.029 U	1.2	0.13	0.32
Anthracene		0.27	0.16	1.5	0.3	0.75
Benzo(a)anthracene		0.34	0.34	3.5	0.43	2.5
Benzo(b)fluoranthene		0.44	0.32	2.2	0.36	1.8
Benzo(k)fluoranthene		0.44	0.26	2.7	0.39	1.6
Benzo(g,h,i)perylene		0.31	0.23	2	0.48	0.94
Benzo(a)pyrene		0.32	0.21	3.1	0.52	2.3
Chrysene		0.71	0.67	4.1	0.62	2.5
Dibenzo(a,h)anthracene		0.16	0.099	0.81	0.13	0.39
Fluoranthene		1.4	1.1	6.2	0.85	4.1
Fluorene		0.067	0.029 U	0.63	0.21	0.65
Indeno(1,2,3-cd)pyrene		0.31	0.2	2	0.35	0.93
Naphthalene	170	0.36	0.044	0.84	0.28	0.75
Phenanthrene		0.64	0.35	3.8	1	3.7
Pyrene		1.5	1.2	8.6	1.1	4.5
		PCBs (
Aroclor 1016		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1221		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1232		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1242		0.09 U	0.093 U	0.094	0.09 U	0.4
Aroclor 1248		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1254		0.18 U	0.19 U	0.18 U	0.18 U	0.33
Aroclor 1260		0.18 U	0.19 U	0.18 U	0.18 U	0.16 U
Total PCBs		0.810 U	0.845 U	0.814	0.810 U	1.226
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony		0.97 UJ	1 UJ	1 UJ	1 UJ	1.1 UJ
Arsenic	750	8.1	9.2 J	6.5	2.5 J	7.2
Barium	690,000	61 J	47 J	82 J	19 J	68 J
Beryllium	1,300	0.75	0.87	1.1	0.63	1
Cadmium	1,800	0.91	0.54	0.79	0.52 U	1.1
Chromium	270	14 J	20 J	15 J	6.9 J	20 J
Copper		66 J	32 J	43 J	8.9 J	110 J
Lead		380 J	41	130 J	31	150 J
Mercury	10	0.35	0.28	0.15	0.035	0.076
Nickel	13,000	17 J	33 J	20 J	5.5 J	23 J
Selenium		0.97 U	1 U	1 U	1 U	1.1 U
Silver		0.97 U	1 U	1 U	1 U	1.1 U
Thallium		0.97 U	4.2	1	1 U	1.1 U
Zinc		160 J	70 J	90 J	23 J	290 J
Total Cyanide		0.31 U	0.27 U	0.26 U	0.26 U	0.23 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit. (5) PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ J - Indicates an estimated value.

 $^{(7)\} Soil\ samples\ (SP10-001,SP18B-002,SB21-002,SB22-001,SB23-003,SB24-002,SB26-001,SP40-001,SB45-002,SB50-001,SB57-001,and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dept	th (feet below grou	ınd surface)/Conce	entration
	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001
Compound/Analyte	Level (mg/kg)	4-5	5-7	2-3	9-10	2-3
	·	TCL Volat	iles (mg/kg)			
Acetone	100,000	0.32	0.061 U	0.067	0.061	0.073
Benzene	0.8	0.017 U	0.012 U	0.015	0.012 U	0.079
Bromodichloromethane	3,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Bromoform	53	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Bromomethane	10	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
2-Butanone		0.072	0.025 U	0.024 U	0.023 U	0.025 U
Carbon Disulfide	720	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Carbon Tetrachloride	0.3	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chlorobenzene	130	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chloroethane +	1,500	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Chloroform	0.3	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chloromethane +	110	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Dibromochloromethane	1,300	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1-Dichloroethane	1,300	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,2-Dichloroethane	0.4	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1-Dichloroethene	1,500	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
cis-1,2-Dichloroethene	1,200	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
trans-1,2-Dichloroethene	3,100	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,2-Dichloropropane	15	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
cis-1,3-Dichloropropene	1.1	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
trans-1,3-Dichloropropene	1.1	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Ethylbenzene	400	0.017 U	0.012 U	0.012 U	0.012 U	0.15
2-Hexanone +	70	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
4-Methyl-2-Pentanone		0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Methylene Chloride	13	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1,2,2-Tetrachloroethane +	2,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Tetrachloroethene	11	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Toluene	650	0.017 U	0.012 U	0.012 U	0.012 U	0.041
1,1,1-Trichloroethane	1,200	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1,2-Trichloroethane	1,800	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Trichloroethene	5	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Vinyl Chloride	0.28	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
m,p-Xylene*	320	0.017 U	0.012 U	0.012 U	0.012 U	0.11
o-Xylene*	320	0.017 U	0.012 U	0.012 U	0.012 U	0.12
Xylenes, Total	320	NA	NA	NA	NA	NA

- NOTES: (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- $(8) \ Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)\\$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou		
	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001
Compound/Analyte	Level (mg/kg)	4-5	5-7	2-3	9-10	2-3
			atiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Bis(2-chloroethyl)ether **	0.2	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Bis(2-ethylhexyl)phthalate	31,000	0.44 U	1.1	0.38 U	0.39 U	0.38 U
4-Bromophenyl phenyl ether		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Butyl benzyl phthalate	930	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Carbazole		0.44 U	0.41 U	0.67	0.39 U	2.2
4-Chloro-3-methylphenol		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4-Chloroaniline		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Chloronaphthalene		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Chlorophenol	53,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4-Chlorophenyl phenyl ether		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Dibenzofuran	_	0.44 U	0.41 U	0.38 U	0.39 U	0.4
1,2-Dichlorobenzene	560	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
1,3-Dichlorobenzene +	570	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
1,4-Dichlorobenzene	11,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
3,3´-Dichlorobenzidine		0.89 U	0.82 U	0.76 U	0.78 U	0.76 U
2,4-Dichlorophenol		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Diethyl phthalate	2,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Dimethyl phthalate +	1,300	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Di-n-butyl phthalate	2,300	0.44 U	0.45	0.38 U	0.39 U	0.38 U
2,4-Dimethylphenol		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4,6-Dinitro-2-methylphenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
2,4-Dinitrophenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
2,4-Dinitrotoluene		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2,6-Dinitrotoluene		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Di-n-octyl phthalate	10,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachlorobenzene	1	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachlorobutadiene +	1,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachlorocyclopentadiene	10	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachloroethane		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Isophorone	4,600	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Methylnaphthalene		0.44 U	0.41 U	0.54	0.39 U	2.7
2-Methylphenol		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4-Methylphenol		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Nitroaniline +	73	2.1 U	2 U	1.8 U	1.9 U	1.8 U
3-Nitroaniline		2.1 U	2 U	1.8 U	1.9 U	1.8 U
4-Nitroaniline		2.1 U	2 U	1.8 U	1.9 U	1.8 U
Nitrobenzene	92	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Nitrophenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
4-Nitrophenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
N-Nitrosodi-n-propylamine		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
N-Nitrosodiphenylamine		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2, 2'-Oxybis(1-Chloropropane)		0.019 U	0.017 U	0.016 U	0.017 U	0.016 U
Pentachlorophenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
Phenol		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
1,2,4-Trichlorobenzene	3,200	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2,4,5-Trichlorophenol		0.89 U	0.82 U	0.76 U	0.78 U	0.76 U
2,4,6-Trichlorophenol	200	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dept	h (feet below grou		ntration
	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001
Compound/Analyte	Level (mg/kg)	4-5	5-7	2-3	9-10	2-3
		PAHs (mg/kg)				
Acenaphthene		0.034 U	0.17	0.84	0.03 U	1.4
Acenaphthylene		0.034 U	0.13	1.3	0.03 U	0.59
Anthracene		0.034 U	0.7	1.1	0.03 U	1.7
Benzo(a)anthracene		0.034 U	0.78	3	0.03 U	3.3
Benzo(b)fluoranthene		0.034 U	1.1	1.9	0.03 U	2
Benzo(k)fluoranthene		0.034 U	0.91	2.5	0.03 U	2.4
Benzo(g,h,i)perylene		0.034 U	1.2	1.2	0.03 U	1.4
Benzo(a)pyrene		0.034 U	0.75	3.3	0.03 U	3.3
Chrysene		0.034 U	1.7	3.5	0.03 U	4.2
Dibenzo(a,h)anthracene		0.034 U	0.41	0.55	0.03 U	0.71
Fluoranthene		0.034 U	2.4	4.3	0.03 U	7.2
Fluorene		0.034 U	0.31	0.77	0.03 U	1.5
Indeno(1,2,3-cd)pyrene		0.034 U	0.74	1.3	0.03 U	1.6
Naphthalene	170	0.034 U	0.15	0.22	0.03 U	4.2
Phenanthrene		0.034 U	1.5	2.9	0.03 U	7
Pyrene		0.034 U	3.4	6.6	0.03 U	6.1
		PCBs (mg/kg)				
Aroclor 1016		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U
Aroclor 1221		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U
Aroclor 1232		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U
Aroclor 1242		0.1 U	5.8	0.092 U	0.095 U	0.29
Aroclor 1248		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U
Aroclor 1254		0.2 U	3.4	0.19 U	0.19 U	0.29
Aroclor 1260		0.2 U	0.19 U	0.19 U	0.19 U	0.18 U
Total PCBs		0.900 U	9.774	0.840 U	0.855 U	1.128
	Priority	Pollutant Metals a		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
Antimony		1.2 UJ	1.4 J	1.1 UJ	1.1 UJ	1.1 UJ
Arsenic	750	3.6 J	8.1 J	9	5.8 J	7.3
Barium	690,000	58 J	260 J	78 J	18 J	160 J
Beryllium	1,300	1.3	0.72	1.1	0.97	0.95
Cadmium	1,800	0.6 U	3	1.1	0.55 U	1.2
Chromium	270	20 J	570 J	14 J	15 J	13 J
Copper		18 J	220 J	140 J	19 J	35 J
Lead		17	280	160 J	13	450 J
Mercury	10	0.031 U	0.31	0.32	0.027 U	0.22
Nickel	13,000	24 J	76 J	20 J	23 J	17 J
Selenium		1.2 U	1.2 U	1.1 U	1.1 U	1.1 U
Silver		1.2 U	1.3	1.1 U	1.1 U	1.1 U
Thallium		1.2	1.2 U	1.1 U	1.5	1.1 U
Zinc		63 J	780 J	240 J	37 J	320 J
Total Cyanide		0.31 U	0.33 U	0.27 U	0.31 U	0.25 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽⁵⁾ PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ J - Indicates an estimated value.

 $[\]begin{tabular}{ll} (7) & Shaded value exceeds Tier 1 screening level. \end{tabular}$

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dept	th (feet below grou	ınd surface)/Conce	entration
	Screening	SP06-002	SP06-003	SP07-001	SP07-002	SP07-003
Compound/Analyte	Level (mg/kg)	3-4	8-10	1-2	9-10	16-17
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.16	0.092 U	0.06 U	0.068 U	0.046 U
Benzene	0.8	0.78	0.056	0.012 U	0.014 U	0.0093 U
Bromodichloromethane	3,000	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Bromoform	53	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Bromomethane	10	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
2-Butanone		0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Carbon Disulfide	720	0.025 U	0.018 U	0.04	0.014 U	0.0093 U
Carbon Tetrachloride	0.3	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Chlorobenzene	130	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Chloroethane +	1,500	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Chloroform	0.3	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Chloromethane +	110	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Dibromochloromethane	1,300	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1-Dichloroethane	1,300	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,2-Dichloroethane	0.4	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1-Dichloroethene	1,500	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
cis-1,2-Dichloroethene	1,200	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
trans-1,2-Dichloroethene	3,100	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,2-Dichloropropane	15	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
cis-1,3-Dichloropropene	1.1	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
trans-1,3-Dichloropropene	1.1	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Ethylbenzene	400	3	0.38	0.013	0.014 U	0.0093 U
2-Hexanone +	70	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
4-Methyl-2-Pentanone		0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Methylene Chloride	13	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1,2,2-Tetrachloroethane +	2,000	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Tetrachloroethene	11	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Toluene	650	0.79	0.044	0.012	0.014 U	0.0093 U
1,1,1-Trichloroethane	1,200	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1,2-Trichloroethane	1,800	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Trichloroethene	5	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Vinyl Chloride	0.28	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
m,p-Xylene*	320	3	0.098	0.016	0.014 U	0.0093 U
o-Xylene*	320	2	0.17	0.012 U	0.014 U	0.0093 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- NOTES: (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- $(8) \ Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)\\$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SP06-002	SP06-003	SP07-001	SP07-002	SP07-003		
Compound/Analyte	Level (mg/kg)	3-4	8-10	1-2	9-10	16-17		
		TCL Semivol	latiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Bis(2-chloroethyl)ether **	0.2	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
4-Bromophenyl phenyl ether		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Butyl benzyl phthalate	930	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Carbazole		0.39 U	1.4	0.47	0.38 U	0.39 U		
4-Chloro-3-methylphenol		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
4-Chloroaniline		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2-Chloronaphthalene		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2-Chlorophenol	53,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
4-Chlorophenyl phenyl ether		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Dibenzofuran		1.3	1.6	0.37 U	0.38 U	0.39 U		
1,2-Dichlorobenzene	560	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
1,3-Dichlorobenzene +	570	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
1,4-Dichlorobenzene	11,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
3,3´-Dichlorobenzidine		0.78 U	2.2 U	0.74 U	0.76 U	0.79 U		
2,4-Dichlorophenol		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Diethyl phthalate	2,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Dimethyl phthalate +	1,300	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Di-n-butyl phthalate	2,300	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2,4-Dimethylphenol		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
4,6-Dinitro-2-methylphenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U		
2,4-Dinitrophenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U		
2,4-Dinitrotoluene		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2,6-Dinitrotoluene		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Di-n-octyl phthalate	10,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Hexachlorobenzene **	1	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Hexachlorobutadiene +	1,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Hexachlorocyclopentadiene	10	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Hexachloroethane		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
Isophorone	4,600	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2-Methylnaphthalene		20	17	0.4	0.38 U	0.39 U		
2-Methylphenol		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
4-Methylphenol		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2-Nitroaniline +	73	1.9 U	5.2 U	1.8 U	1.9 U	1.9 U		
3-Nitroaniline		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U		
4-Nitroaniline		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U		
Nitrobenzene	92	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2-Nitrophenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U		
4-Nitrophenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U		
N-Nitrosodi-n-propylamine		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
N-Nitrosodiphenylamine		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.046 U	0.016 U	0.016 U	0.017 U		
Pentachlorophenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U		
Phenol		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
1,2,4-Trichlorobenzene	3,200	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		
2,4,5-Trichlorophenol		0.78 U	2.2 U	0.74 U	0.76 U	0.79 U		
2,4,6-Trichlorophenol	200	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U		

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		ocation and Dept	h (feet below grou		
	Screening	SP06-002	SP06-003	SP07-001	SP07-002	SP07-003
Compound/Analyte	Level (mg/kg)	3-4	8-10	1-2	9-10	16-17
		PAHs (mg/kg)			
Acenaphthene		10	4.5	0.28 U	0.029 U	0.03 U
Acenaphthylene		2	4.2	0.39	0.029 U	0.03 U
Anthracene		9.6	4.9	0.54	0.029 U	0.03 U
Benzo(a)anthracene		3.9	4.2	1.5	0.029 U	0.03 U
Benzo(b)fluoranthene		1.1	1.3	1.3	0.029 U	0.03 U
Benzo(k)fluoranthene		0.89	1.1	0.98	0.029 U	0.03 U
Benzo(g,h,i)perylene		1.2	0.82 U	0.77	0.029 U	0.03 U
Benzo(a)pyrene		2.7	0.97	1.6	0.029 U	0.03 U
Chrysene		5.1	4.3	1.6	0.029 U	0.03 U
Dibenzo(a,h)anthracene		0.52	0.82 U	0.28 U	0.029 U	0.03 U
Fluoranthene		9.1	6.8	2.5	0.029 U	0.03 U
Fluorene		10	6.5	0.28 U	0.029 U	0.03 U
Indeno(1,2,3-cd)pyrene		1.2	0.82 U	0.71	0.029 U	0.03 U
Naphthalene	170	27	13	0.28	0.029 U	0.03 U
Phenanthrene		34	21	2.1	0.029 U	0.03 U
Pyrene		15	10	2.8	0.029 U	0.03 U
		PCBs (1	U U/	•		
Aroclor 1016		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U
Aroclor 1221		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U
Aroclor 1232		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U
Aroclor 1242		0.094 U	0.09 U	1.5	0.09 U	0.096 U
Aroclor 1248		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U
Aroclor 1254		0.19 U	0.18 U	0.91 U	0.18 U	0.19 U
Aroclor 1260		0.19 U	0.18 U	0.18 U	0.18 U	0.19 U
Total PCBs		0.850 U	0.810 U	2.954	0.810 U	0.860 U
	Priority	Pollutant Metals a		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
Antimony		1.1 UJ	NA	1 UJ	1.1 UJ	1.1 UJ
Arsenic	750	6.5 J	NA	4.4	7.7 J	8.1 J
Barium	690,000	67 J	NA	370 J	38 J	98 J
Beryllium	1,300	1	NA	5.7	0.98	1.2
Cadmium	1,800	0.98	NA	1.4	0.54 U	0.57 U
Chromium	270	12 J	NA	120 J	17 J	21 J
Copper		71 J	NA	400 J	28 J	24 J
Lead		190	NA	180 J	55	16
Mercury	10	0.15	NA	0.091	0.029 U	0.032 U
Nickel	13,000	17 J	NA	17 J	33 J	31 J
Selenium		1.1 U	NA	2.8	1.1 U	1.1 U
Silver		1.1 U	NA	1 U	1.1 U	1.1 U
Thallium		1.1 U	NA	1 U	1.4	2.1
Zinc		190 J	NA	180 J	69 J	39 J
Total Cyanide		0.26 U	NA	0.26 U	0.27 U	0.29 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit. (5) PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ J - Indicates an estimated value.

⁽⁷⁾ NA - Not analyzed.

 $^{(8) \} Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) \\ (2) \ Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SP45-002, SB50-001, SP40-001, SP40-001$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dent	th (feet below grou	ınd surface)/Conce	entration
	Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002
Compound/Analyte	Level (mg/kg)	0-0.5	7-8	3-5	1-2	6-7
Compound/Anaryte	Level (Ilig/kg)		iles (mg/kg)	3-3	1-2	0-7
A	100,000	0.047 U	0.097	0.12	0.062	0.071 U
Acetone	,		,	0	0.00	
Benzene	0.8	0.0095 U	0.011 U	0.19	0.0092	3.6
Bromodichloromethane	3,000	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Bromoform	53	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Bromomethane	10	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
2-Butanone		0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Carbon Disulfide	720	0.0095 U	0.011 U	0.013	0.0074 U	0.014 U
Carbon Tetrachloride	0.3	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chlorobenzene	130	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chloroethane +	1,500	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Chloroform	0.3	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chloromethane +	110	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Dibromochloromethane	1,300	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1-Dichloroethane	1,300	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,2-Dichloroethane	0.4	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1-Dichloroethene	1,500	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
cis-1,2-Dichloroethene	1,200	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
trans-1,2-Dichloroethene	3,100	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,2-Dichloropropane	15	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
cis-1,3-Dichloropropene	1.1	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
trans-1,3-Dichloropropene	1.1	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Ethylbenzene	400	0.0095 U	0.011 U	0.07	0.014	8.2
2-Hexanone +	70	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
4-Methyl-2-Pentanone		0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Methylene Chloride	13	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1,2,2-Tetrachloroethane +	2,000	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Tetrachloroethene	11	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Toluene	650	0.0095 U	0.011 U	0.011 U	0.0087	0.014 U
1,1,1-Trichloroethane	1,200	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1,2-Trichloroethane	1,800	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Trichloroethene	5	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Vinyl Chloride	0.28	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
m,p-Xylene*	320	0.0095 U	0.011 U	0.013	0.021	5
o-Xylene*	320	0.0095 U	0.011 U	0.087	0.014	1.4
Xylenes, Total	320	NA	NA	NA	NA	NA

- NOTES: (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) Shaded value exceeds Tier 1 screening level.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002		
Compound/Analyte	Level (mg/kg)	0-0.5	7-8	3-5	1-2	6-7		
	<u>,, , , , , , , , , , , , , , , , , , ,</u>	TCL Semivol	latiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
Bis(2-chloroethyl)ether **	0.2	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
Bis(2-ethylhexyl)phthalate	31,000	2.9	0.4 U	0.75	2.1	0.39 U		
4-Bromophenyl phenyl ether		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
Butyl benzyl phthalate	930	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
Carbazole		0.41 U	0.4 U	3.7	1.1	0.39 U		
4-Chloro-3-methylphenol		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
4-Chloroaniline		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
2-Chloronaphthalene		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
2-Chlorophenol	53,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
4-Chlorophenyl phenyl ether		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
Dibenzofuran		0.41 U	0.4 U	0.65	2	1.2		
1,2-Dichlorobenzene	560	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
1,3-Dichlorobenzene +	570	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
1,4-Dichlorobenzene	11,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
3,3´-Dichlorobenzidine		0.81 U	0.8 U	0.75 U	0.72 U	0.77 U		
2,4-Dichlorophenol		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
Diethyl phthalate	2,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
Dimethyl phthalate +	1,300	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
Di-n-butyl phthalate	2,300	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
2,4-Dimethylphenol		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U		
2,4-Dinitrophenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U		
2,4-Dinitrotoluene		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
2,6-Dinitrotoluene		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
Di-n-octyl phthalate	10,000	0.71	0.4 U	0.37 U	0.36 U	0.39 U		
Hexachlorobenzene	1	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
Hexachlorobutadiene +	1,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
Hexachlorocyclopentadiene	10	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
Hexachloroethane		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
Isophorone	4,600	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
2-Methylnaphthalene		0.41 U	0.4 U	0.37 U	27	23		
2-Methylphenol		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
4-Methylphenol		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
2-Nitroaniline +	73	2 U	1.9 U	1.8 U	1.8 U	1.9 U		
3-Nitroaniline		2 U	1.9 U	1.8 U	1.8 U	1.9 U		
4-Nitroaniline		2 U	1.9 U	1.8 U	1.8 U	1.9 U		
Nitrobenzene	92	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
2-Nitrophenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U		
4-Nitrophenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U		
N-Nitrosodi-n-propylamine		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
N-Nitrosodiphenylamine		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.017 U	0.016 U	0.015 U	0.016 U		
Pentachlorophenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U		
Phenol		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
1,2,4-Trichlorobenzene	3,200	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		
2,4,5-Trichlorophenol		0.81 U	0.8 U	0.75 U	0.72 U	0.77 U		
2,4,6-Trichlorophenol	200	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U		

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002		
Compound/Analyte	Level (mg/kg)	0-0.5	7-8	3-5	1-2	6-7		
		PAHs ((mg/kg)					
Acenaphthene		0.031 U	0.003 U	0.51	2.4	8.6		
Acenaphthylene		0.28	0.0052	0.36	1.9	5.1		
Anthracene		0.4	0.011	2.3	7.1	8.6		
Benzo(a)anthracene		1.4	0.029	3.3	1.6	1.7		
Benzo(b)fluoranthene		1.2	0.035	2.3	3.5	2.5		
Benzo(k)fluoranthene		0.9	0.027	2.3	3.4	1.7		
Benzo(g,h,i)perylene		0.9	0.015	0.74	3.6	1.6		
Benzo(a)pyrene		1.7	0.031	1.6	3.9	2.2		
Chrysene		1.5	0.035	3.8	9	11		
Dibenzo(a,h)anthracene		0.33	0.006	0.31	1.2	0.59		
Fluoranthene		1.7	0.043	5.3	11	6.8		
Fluorene		0.078	0.0052	0.92	6.9	6.7		
Indeno(1,2,3-cd)pyrene		0.83	0.014	0.69	2.6	1.1		
Naphthalene	170	0.041	0.004	0.52	10	18		
Phenanthrene		1	0.032	5.2	24	26		
Pyrene		2.1	0.056	5.1	14	14		
		PCBs (mg/kg)					
Aroclor 1016		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U		
Aroclor 1221		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U		
Aroclor 1232		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U		
Aroclor 1242		0.37	0.098 U	0.39	3.9	0.094 U		
Aroclor 1248		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U		
Aroclor 1254		0.28	0.2 U	0.41	3.3	0.19 U		
Aroclor 1260		0.2 U	0.2 U	0.18 U	0.18 U	0.19 U		
Total PCBs		1.246	0.890 U	1.332	7.740	0.850 U		
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)				
Antimony		1.2 UJ	1.1 UJ	1 UJ	1.1 J	1.1 UJ		
Arsenic	750	7.2	2.8 J	7.8 J	7.2	13 J		
Barium	690,000	76 J	31 J	140 J	140 J	80 J		
Beryllium	1,300	1.1	1.1	0.6	0.84	1.1		
Cadmium	1,800	0.75	0.54 U	1.1	1.9	0.55 U		
Chromium	270	15 J	18 J	98 J	26 J	18 J		
Copper		50 J	22 J	68 J	120 J	32 J		
Lead		200 J	18	340	260 J	25		
Mercury	10	1.4	0.033	0.21	0.3	0.027 U		
Nickel	13,000	19 J	24 J	38 J	25 J	35 J		
Selenium		1.2 U	1.1 U	1 U	0.9 U	1.1 U		
Silver		1.2 U	1.1 U	1 U	0.9 U	1.1 U		
Thallium		1.2 U	1.5	1 U	1.3	2		
Zinc		170 J	42 J	240 J	830 J	53 J		
Total Cyanide		0.33 U	0.3 U	0.29 U	0.36	0.31 U		

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit. (5) PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ J - Indicates an estimated value.

 $^{(7)\} Soil\ samples\ (SP10-001,SP18B-002,SB21-002,SB22-001,SB23-003,SB24-002,SB26-001,SP40-001,SB45-002,SB50-001,SB57-001,and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

Acetone 1 Benzene Bromodichloromethane Bromomethane 2-Butanone	Tier 1 creening el (mg/kg)	SP10-003 13-14 TCL Volati	SP11-001 0-0.5	SP11-002	SP13-001	SP13-002
Acetone 1 Benzene Bromodichloromethane Bromomethane 2-Butanone	el (mg/kg)	13-14			3113-001	
Acetone 1 Benzene Bromodichloromethane Bromomethane 2-Butanone	<u> </u>			9-10	1-2	6-7
Benzene Bromodichloromethane Bromoform Bromomethane 2-Butanone	00,000	ILL VOISE		<i>J</i> -10	1-2	0-7
Benzene Bromodichloromethane Bromoform Bromomethane 2-Butanone	00,000		` ` ` ` ` ` ` `	0.070	0.062	0.12
Bromodichloromethane Bromoform Bromomethane 2-Butanone	0.0	0.053 U	0.057 U	0.078	0.062	0.12
Bromoform Bromomethane 2-Butanone	0.8	0.92	0.011 U	0.013 U	0.012 U	0.012 U
Bromomethane 2-Butanone	3,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
2-Butanone	53	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
	10	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
		0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Carbon Disulfide	720	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Carbon Tetrachloride	0.3	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Chlorobenzene	130	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Chloroethane +	1,500	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Chloroform	0.3	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Chloromethane +	110	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Dibromochloromethane	1,300	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1-Dichloroethane	1,300	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,2-Dichloroethane	0.4	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1-Dichloroethene	1,500	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
cis-1,2-Dichloroethene	1,200	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
trans-1,2-Dichloroethene	3,100	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,2-Dichloropropane	15	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
cis-1,3-Dichloropropene	1.1	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
trans-1,3-Dichloropropene	1.1	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Ethylbenzene	400	9	0.011 U	0.013 U	0.012 U	0.012 U
2-Hexanone +	70	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
4-Methyl-2-Pentanone		0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Methylene Chloride	13	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1,2,2-Tetrachloroethane +	2,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Tetrachloroethene	11	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Toluene	650	0.6	0.011 U	0.013 U	0.012 U	0.012 U
1,1,1-Trichloroethane	1,200	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1,2-Trichloroethane	1,800	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Trichloroethene	5	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Vinyl Chloride	0.28	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
m,p-Xylene*	320	3.8	0.011 U	0.013 U	0.012 U	0.012 U
o-Xylene*	320	12	0.011 U	0.013 U	0.012 U	0.012 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- NOTES: (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) Shaded value exceeds Tier 1 screening level.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration								
	Screening	SP10-003	SP11-001	SP11-002	SP13-001	SP13-002			
Compound/Analyte	Level (mg/kg)	13-14	0-0.5	9-10	1-2	5P13-002 6-7			
Compound/Anaryte	Level (Ilig/kg)	-	latiles (mg/kg)	<i>)</i> -10	1-2	0-7			
Bis(2-chloroethoxy)methane	I I	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
Bis(2-chloroethyl)ether **	0.2	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
Bis(2-ethylhexyl)phthalate	31,000	0.38 U	1.1	0.38 U	0.36 U	0.4 U			
4-Bromophenyl phenyl ether		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
Butyl benzyl phthalate	930	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
Carbazole		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
4-Chloro-3-methylphenol		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
4-Chloroaniline		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
2-Chloronaphthalene		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
2-Chlorophenol	53,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
4-Chlorophenyl phenyl ether		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
Dibenzofuran		0.75	0.38 U	0.38 U	0.36 U	0.4 U			
1,2-Dichlorobenzene	560	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
1,3-Dichlorobenzene +	570	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
1,4-Dichlorobenzene	11,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
3,3´-Dichlorobenzidine		0.77 U	0.76 U	0.77 U	0.73 U	0.8 U			
2,4-Dichlorophenol		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
Diethyl phthalate	2,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
Dimethyl phthalate +	1,300	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
Di-n-butyl phthalate	2,300	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
2,4-Dimethylphenol		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
4,6-Dinitro-2-methylphenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U			
2,4-Dinitrophenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U			
2.4-Dinitrotoluene		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
2,6-Dinitrotoluene		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
Di-n-octyl phthalate	10.000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
Hexachlorobenzene	1	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
Hexachlorobutadiene +	1,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
Hexachlorocyclopentadiene	10	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
Hexachloroethane		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
Isophorone	4,600	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
2-Methylnaphthalene		20	1.1	0.42	0.86	0.53			
2-Methylphenol		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
4-Methylphenol		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
2-Nitroaniline +	73	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U			
3-Nitroaniline		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U			
4-Nitroaniline		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U			
Nitrobenzene	92	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
2-Nitrophenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U			
4-Nitrophenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U			
N-Nitrosodi-n-propylamine		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
N-Nitrosodiphenylamine		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.016 U	0.015 U	0.017 U			
Pentachlorophenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U			
Phenol		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
1,2,4-Trichlorobenzene	3,200	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			
2,4,5-Trichlorophenol		0.77 U	0.76 U	0.77 U	0.73 U	0.8 U			
2,4,6-Trichlorophenol	200	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U			

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample I	Location and Dept	h (feet below grou	nd surface)/Conce	ntration
	Screening	SP10-003	SP11-001	SP11-002	SP13-001	SP13-002
Compound/Analyte	Level (mg/kg)	13-14	0-0.5	9-10	1-2	6-7
		PAHs (mg/kg)			
Acenaphthene		5.5	1.1	0.046	0.16	0.056
Acenaphthylene		3.7	0.86	0.029 U	0.069	0.03 U
Anthracene		3.1	2.5	0.029 U	0.13	0.03 U
Benzo(a)anthracene		0.37	0.9	0.029 U	0.037	0.03 U
Benzo(b)fluoranthene		0.42	1.7	0.029 U	0.13	0.03 U
Benzo(k)fluoranthene		0.49	1.6	0.029 U	0.11	0.03 U
Benzo(g,h,i)perylene		0.51	0.62	0.029 U	0.2	0.03 U
Benzo(a)pyrene		0.45	1.8	0.029 U	0.094	0.03 U
Chrysene		2.2	3.1	0.032	0.26	0.03 U
Dibenzo(a,h)anthracene		0.13	0.3	0.029 U	0.084	0.03 U
Fluoranthene		1.8	3.7	0.037	0.21	0.03 U
Fluorene		3.8	1.3	0.029 U	0.15	0.03 U
Indeno(1,2,3-cd)pyrene		0.26	0.44	0.029 U	0.14	0.03 U
Naphthalene	170	27	1.5	0.73	0.83	0.99
Phenanthrene		9.3	6.5	0.092	0.34	0.04
Pyrene		3	7.8	0.063	0.28	0.03 U
		PCBs (
Aroclor 1016		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1221		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1232		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1242		0.09 U	0.49	0.094 U	0.98	0.097 U
Aroclor 1248		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1254		0.18 U	0.45	0.19 U	0.9 U	0.19 U
Aroclor 1260		0.18 U	0.18 U	0.19 U	0.18 U	0.19 U
Total PCBs		0.810 U	1.488	0.850 U	2.420	0.865 U
-	11 11		and Total Cyanide	\ U U'		
Antimony		1.1 UJ	1.1 UJ	1.1 UJ	1 J	1.1 UJ
Arsenic	750	7.5 J	5.4	11 J	7.3	9.4 J
Barium	690,000	83 J	120 J	100 J	86 J	86 J
Beryllium	1,300	1.1	1.1	1.1	0.79	1.2
Cadmium	1,800	0.55 U	1.2	0.56 U	0.7	0.57 U
Chromium	270	19 J	16 J	20 J	14 J	20 J
Copper		31 J	90 J	32 J	40 J	34 J
Lead		18	140 J	19	250 J	20
Mercury	10	0.028	0.1	0.028 U	2.9	0.03
Nickel	13,000	39 J	26 J	37 J	19 J	34 J
Selenium		1.1 U	1.1 U	1.1 U	1 U	1.1 U
Silver		1.1 U	1.1 U	1.1 U	1 U	1.1 U
Thallium		2.5	1.5	2	1.5	2
Zinc		49 J	220 J	47 J	94 J	45 J
Total Cyanide		0.25 U	0.89	0.27 U	0.26 U	0.3 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit. (5) PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ J - Indicates an estimated value.

 $^{(7)\} Soil\ samples\ (SP10-001,SP18B-002,SB21-002,SB22-001,SB23-003,SB24-002,SB26-001,SP40-001,SB45-002,SB50-001,SB57-001,and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SP13-003	SB14-001	SB14-002	SB15-001	SB15-002
Compound/Analyte	Level (mg/kg)	15-16	1-2	6-8	0-0.5	6-8
	<u> </u>	TCL Volat	iles (mg/kg)			
Acetone	100,000	0.055 U	0.051 U	0.078	0.037 U	0.051 U
Benzene	0.8	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromodichloromethane	3,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromoform	53	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromomethane	10	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
2-Butanone		0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Carbon Disulfide	720	0.011 U	0.01 U	0.015 U	0.0074 U	0.018
Carbon Tetrachloride	0.3	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chlorobenzene	130	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chloroethane +	1,500	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Chloroform	0.3	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chloromethane +	110	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Dibromochloromethane	1,300	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1-Dichloroethane	1,300	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,2-Dichloroethane	0.4	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1-Dichloroethene	1,500	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
cis-1,2-Dichloroethene	1,200	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
trans-1,2-Dichloroethene	3,100	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,2-Dichloropropane	15	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
cis-1,3-Dichloropropene	1.1	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
trans-1,3-Dichloropropene	1.1	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Ethylbenzene	400	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
2-Hexanone +	70	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
4-Methyl-2-Pentanone		0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Methylene Chloride	13	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,2,2-Tetrachloroethane +	2,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Tetrachloroethene	11	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Toluene	650	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,1-Trichloroethane	1,200	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,2-Trichloroethane	1,800	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Trichloroethene	5	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Vinyl Chloride	0.28	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
m,p-Xylene*	320	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
o-Xylene*	320	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- NOTES: (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- $(8) \ Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)\\$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	A		h (feet below grou		
	Screening	SP13-003	SB14-001	SB14-002	SB15-001	SB15-002
Compound/Analyte	Level (mg/kg)	15-16	1-2	6-8	0-0.5	6-8
			latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Bis(2-chloroethyl)ether **	0.2	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	0.49	0.42 U	0.58	0.39 U
4-Bromophenyl phenyl ether		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Butyl benzyl phthalate	930	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Carbazole		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
4-Chloro-3-methylphenol		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
4-Chloroaniline		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2-Chloronaphthalene		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2-Chlorophenol	53,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
4-Chlorophenyl phenyl ether		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Dibenzofuran		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
1,2-Dichlorobenzene	560	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
1,3-Dichlorobenzene +	570	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
1,4-Dichlorobenzene	11,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
3,3´-Dichlorobenzidine		0.78 U	0.71 U	0.84 U	0.81 U	0.78 U
2,4-Dichlorophenol		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Diethyl phthalate	2,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Dimethyl phthalate +	1,300	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Di-n-butyl phthalate	2,300	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2,4-Dimethylphenol		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
4,6-Dinitro-2-methylphenol		1.9 U	1.7 U	2 U	2 U	1.9 U
2,4-Dinitrophenol		1.9 U	1.7 U	2 U	2 U	1.9 U
2,4-Dinitrotoluene		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2,6-Dinitrotoluene		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Di-n-octyl phthalate	10,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Hexachlorobenzene	1	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Hexachlorobutadiene +	1,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Hexachlorocyclopentadiene	10	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Hexachloroethane		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
Isophorone	4,600	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2-Methylnaphthalene		0.79	0.35 U	0.42 U	0.4 U	0.39 U
2-Methylphenol		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
4-Methylphenol		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2-Nitroaniline +	73	1.9 U	1.7 U	2 U	2 U	1.9 U
3-Nitroaniline		1.9 U	1.7 U	2 U	2 U	1.9 U
4-Nitroaniline		1.9 U	1.7 U	2 U	2 U	1.9 U
Nitrobenzene	92	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2-Nitrophenol		1.9 U	1.7 U	2 U	2 U	1.9 U
4-Nitrophenol		1.9 U	1.7 U	2 U	2 U	1.9 U
N-Nitrosodi-n-propylamine		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
N-Nitrosodiphenylamine		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.015 U	0.018 U	0.017 U	0.017 U
Pentachlorophenol		1.9 U	1.7 U	2 U	2 U	1.9 U
Phenol		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
1,2,4-Trichlorobenzene	3,200	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U
2,4,5-Trichlorophenol		0.78 U	0.71 U	0.84 U	0.81 U	0.78 U
2,4,6-Trichlorophenol	200	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SP13-003	SB14-001	SB14-002	SB15-001	SB15-002
Compound/Analyte	Level (mg/kg)	15-16	1-2	6-8	0-0.5	6-8
•		PAHs	(mg/kg)			
Acenaphthene		0.077	0.15	0.032 U	0.031 U	0.03 U
Acenaphthylene		0.03 U	0.18	0.032 U	0.13	0.03 U
Anthracene		0.03 U	0.25	0.032 U	0.031 U	0.03 U
Benzo(a)anthracene		0.03 U	3.5	0.032 U	0.15	0.03 U
Benzo(b)fluoranthene		0.03 U	1.8	0.032 U	0.13	0.03 U
Benzo(k)fluoranthene		0.03 U	1.6	0.032 U	0.13	0.03 U
Benzo(g,h,i)perylene		0.03 U	0.66	0.032 U	0.17	0.03 U
Benzo(a)pyrene		0.03 U	3	0.032 U	0.2	0.03 U
Chrysene		0.03 U	3.2	0.032 U	0.21	0.03 U
Dibenzo(a,h)anthracene		0.03 U	0.35	0.032 U	0.057	0.03 U
Fluoranthene		0.03 U	4.2	0.035	0.24	0.087
Fluorene		0.036	0.15	0.032 U	0.031 U	0.03 U
Indeno(1,2,3-cd)pyrene		0.03 U	0.67	0.032 U	0.14	0.03 U
Naphthalene	170	1.1	0.19	0.11	0.031 U	0.051
Phenanthrene		0.063	0.3	0.071	0.17	0.083
Pyrene		0.03 U	11	0.056	0.33	0.13
			(mg/kg)			
Aroclor 1016		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1221		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1232		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1242		0.093 U	0.12	0.1 U	0.22	0.096 U
Aroclor 1248		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1254		0.19 U	0.17 U	0.2 U	0.2 U	0.19 U
Aroclor 1260		0.19 U	0.17 U	0.2 U	0.2 U	0.19 U
Total PCBs		0.845 U	0.800	0.900 U	1.004	0.860 U
A			and Total Cyanide			
Antimony		1 UJ	0.98 UJ	1.1 UJ	1 UJ	1.1 UJ
Arsenic	750	9.6 J	3.3	15 J	9.3	12 J
Barium	690,000	74 J	32 J	31 J	150 J	26 J
Beryllium	1,300	1	0.61	1.2	0.99	1.1
Cadmium	1,800	0.66	0.59	0.57 U	2.2	0.57 U
Chromium	270	17 J	12 J	19 J	33 J	16 J
Copper		34 J	18 J	32 J	120 J	18 J
Lead	 10	19 0.061	85 J 0.06	26	340 J 0.23	0.027
Mercury				0.031 U		
Nickel	13,000	30 J	10 J	43 J	31 J	27 J
Selenium Silver		1 U 1 U	0.98 U	1.1 U 1.1 U	1 U 1 U	1.1 U 1.1 U
Thallium		1.9	0.98 U		1 U	
			0.98 U	1.2		1.1
Zinc		42 J	91 J 0.28 U	47 J 0.32 U	550 J	36 J 0.27 U
Total Cyanide NOTES:		0.26 U	0.28 U	0.32 U	0.32 U	0.27 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

⁽⁵⁾ PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ J - Indicates an estimated value.

 $^{(7)\} Soil\ samples\ (SP10-001,SP18B-002,SB21-002,SB22-001,SB23-003,SB24-002,SB26-001,SP40-001,SB45-002,SB50-001,SB57-001,and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dept	th (feet below grou	und surface)/Conce	entration
	Screening	SB15-003	SP16-001	SP16-002	SP16-003	SB17-001
Compound/Analyte	Level (mg/kg)	10-12	2-3	9-10	15-16	1-2
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.1	0.053 U	0.1	0.062 U	0.06 U
Benzene	0.8	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromodichloromethane	3,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromoform	53	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromomethane	10	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
2-Butanone		0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Carbon Disulfide	720	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Carbon Tetrachloride	0.3	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chlorobenzene	130	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chloroethane +	1,500	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Chloroform	0.3	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chloromethane +	110	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Dibromochloromethane	1,300	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1-Dichloroethane	1,300	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,2-Dichloroethane	0.4	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1-Dichloroethene	1,500	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
cis-1,2-Dichloroethene	1,200	0.011 U	0.053	0.0098 U	0.012 U	0.012 U
trans-1,2-Dichloroethene	3,100	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,2-Dichloropropane	15	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
cis-1,3-Dichloropropene	1.1	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
trans-1,3-Dichloropropene	1.1	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Ethylbenzene	400	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
2-Hexanone +	70	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
4-Methyl-2-Pentanone		0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Methylene Chloride	13	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,2,2-Tetrachloroethane +	2,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Tetrachloroethene	11	0.011 U	0.1	0.0098 U	0.012 U	0.012 U
Toluene	650	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,1-Trichloroethane	1,200	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,2-Trichloroethane	1,800	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Trichloroethene	5	0.011 U	0.017	0.0098 U	0.012 U	0.012 U
Vinyl Chloride	0.28	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
m,p-Xylene*	320	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
o-Xylene*	320	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- NOTES: (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- $(8) \ Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)\\$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou		
	Screening	SB15-003	SP16-001	SP16-002	SP16-003	SB17-001
Compound/Analyte	Level (mg/kg)	10-12	2-3	9-10	15-16	1-2
			latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Bis(2-chloroethyl)ether **	0.2	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Bis(2-ethylhexyl)phthalate	31,000	0.42 U	1.6	0.39 U	0.39 U	0.94
4-Bromophenyl phenyl ether		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Butyl benzyl phthalate	930	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Carbazole		0.42 U	0.75	0.39 U	0.39 U	0.36 U
4-Chloro-3-methylphenol		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
4-Chloroaniline		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2-Chloronaphthalene		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2-Chlorophenol	53,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
4-Chlorophenyl phenyl ether		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Dibenzofuran		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
1,2-Dichlorobenzene	560	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
1,3-Dichlorobenzene +	570	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
1,4-Dichlorobenzene	11,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
3,3´-Dichlorobenzidine		0.85 U	0.73 U	0.77 U	0.77 U	0.73 U
2,4-Dichlorophenol		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Diethyl phthalate	2,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Dimethyl phthalate +	1,300	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Di-n-butyl phthalate	2,300	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2,4-Dimethylphenol		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
4,6-Dinitro-2-methylphenol		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
2,4-Dinitrophenol		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
2,4-Dinitrotoluene		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2,6-Dinitrotoluene		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Di-n-octyl phthalate	10,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Hexachlorobenzene	1	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Hexachlorobutadiene +	1,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Hexachlorocyclopentadiene	10	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Hexachloroethane		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Isophorone	4,600	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2-Methylnaphthalene		0.42 U	0.64	0.39 U	0.39 U	0.36 U
2-Methylphenol		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
4-Methylphenol		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2-Nitroaniline +	73	2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
3-Nitroaniline		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
4-Nitroaniline		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
Nitrobenzene	92	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2-Nitrophenol		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
4-Nitrophenol		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
N-Nitrosodi-n-propylamine		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
N-Nitrosodiphenylamine		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2, 2'-Oxybis(1-Chloropropane)		0.018 U	0.015 U	0.016 U	0.016 U	0.015 U
Pentachlorophenol		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
Phenol		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
1,2,4-Trichlorobenzene	3,200	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2,4,5-Trichlorophenol		0.85 U	0.73 U	0.77 U	0.77 U	0.73 U
2,4,6-Trichlorophenol	200	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration								
	Tier 1							
G	Screening	SB15-003 10-12	SP16-001 2-3	SP16-002 9-10	SP16-003	SB17-001		
Compound/Analyte	Level (mg/kg)			9-10	15-16	1-2		
	- п		(mg/kg)					
Acenaphthene		0.032 U	0.5	0.029 U	0.029 U	0.036		
Acenaphthylene		0.032 U	0.15	0.029 U	0.029 U	0.049		
Anthracene		0.032 U	0.81	0.029 U	0.029 U	0.21		
Benzo(a)anthracene		0.032 U	0.36	0.029 U	0.029 U	0.089		
Benzo(b)fluoranthene		0.032 U	0.92	0.029 U	0.029 U	0.15		
Benzo(k)fluoranthene		0.032 U	1.1	0.029 U	0.029 U	0.12		
Benzo(g,h,i)perylene		0.032 U	0.81	0.029 U	0.029 U	0.034		
Benzo(a)pyrene		0.032 U	0.75	0.029 U	0.029 U	0.069		
Chrysene		0.032 U	2.3	0.029 U	0.029 U	0.087		
Dibenzo(a,h)anthracene		0.032 U	0.28	0.029 U	0.029 U	0.028 U		
Fluoranthene		0.032 U	1.8	0.029 U	0.029 U	0.12		
Fluorene		0.032 U	0.44	0.029 U	0.029 U	0.046		
Indeno(1,2,3-cd)pyrene		0.032 U	0.54	0.029 U	0.029 U	0.034		
Naphthalene	170	0.032 U	0.64	0.029 U	0.029 U	0.051		
Phenanthrene		0.032 U	2.2	0.029 U	0.029 U	0.21		
Pyrene		0.032 U	2.7	0.029 U	0.029 U	0.18		
			(mg/kg)					
Aroclor 1016		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U		
Aroclor 1221		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U		
Aroclor 1232		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U		
Aroclor 1242		0.1 U	4.7	0.094 U	0.095 U	0.15		
Aroclor 1248		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U		
Aroclor 1254		0.21 U	4.3	0.19 U	0.19 U	0.18 U		
Aroclor 1260		0.21 U	0.18 U	0.19 U	0.19 U	0.18 U		
Total PCBs		0.920 U	9.532	0.850 U	0.855 U	0.862		
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)				
Antimony		1.1 UJ	1.1 J	1 UJ	1.1 UJ	1 UJ		
Arsenic	750	5 J	6.7	12 J	9.6 J	1.4		
Barium	690,000	22 J	130 J	79 J	84 J	9.4 J		
Beryllium	1,300	1.2	1.3	1.1	1.1	0.54		
Cadmium	1,800	0.57 U	2.3	0.52 U	0.56 U	0.5 U		
Chromium	270	19 J	47 J	17 J	17 J	5.3 J		
Copper		31 J	170 J	39 J	28 J	4.9 J		
Lead		16	150 J	21	17	7.3 J		
Mercury	10	0.032 U	0.43	0.027 U	0.033	0.04		
Nickel	13,000	30 J	40 J	37 J	24 J	3.3 J		
Selenium		1.1 U	1 U	1 U	1.1 U	1 U		
Silver		1.1 U	1 U	1 U	1.1 U	1 U		
Thallium		2.5	1.4	1.8	1.7	1 U		
Zinc		42 J	600 J	40 J	33 J	55 J		
		0.28 U	0.26 U	0.25 U				

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Den	th (feet below grou	ind surface)/Conce	entration
	Screening	SB18B-001	SB19-001	SB20-001	SB21-001	SB22-002
Compound/Analyte	Level (mg/kg)	1-2	1-2	0-0.5	1-2	8-10
Compound/Amaryte	Level (mg/kg)		iles (mg/kg)	0-0.5	1-2	0.10
Acetone	100.000	0.062 U	0.05	0.12	0.036	0.065
Benzene	0.8	0.012 U	0.039	0.0084 U	0.030	0.0089 U
Bromodichloromethane	3,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Bromoform	53	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Bromomethane	10	0.012 U	0.0081 U	0.0034 U	0.0003 U	0.0089 U
2-Butanone		0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Carbon Disulfide	720	0.012 U	0.0081 U	0.011	0.0065 U	0.0089 U
Carbon Tetrachloride	0.3	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Chlorobenzene	130	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Chloroethane +	1,500	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Chloroform	0.3	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Chloromethane +	110	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Dibromochloromethane	1,300	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1.1-Dichloroethane	1,300	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1.2-Dichloroethane	0.4	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1.1-Dichloroethene	1,500	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
cis-1.2-Dichloroethene	1,200	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
trans-1,2-Dichloroethene	3,100	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,2-Dichloropropane	15	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
cis-1,3-Dichloropropene	1.1	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
trans-1,3-Dichloropropene	1.1	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Ethylbenzene	400	0.012 U	0.22	0.014	0.12	0.0089 U
2-Hexanone +	70	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
4-Methyl-2-Pentanone		0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Methylene Chloride	13	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,1,2,2-Tetrachloroethane +	2,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Tetrachloroethene	11	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Toluene	650	0.012 U	0.064	0.0097	0.018	0.0089 U
1,1,1-Trichloroethane	1,200	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,1,2-Trichloroethane	1,800	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Trichloroethene	5	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Vinyl Chloride	0.28	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
m,p-Xylene*	320	0.012 U	0.2	0.031	0.034	0.0089 U
o-Xylene*	320	0.012 U	0.12	0.011	0.036	0.0089 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- NOTES: (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- $(8) \ Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)\\$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration								
	Screening	SB18B-001	SB19-001	SB20-001	SB21-001	SB22-002		
Compound/Analyte	Level (mg/kg)	1-2	1-2	0-0.5	1-2	8-10		
		TCL Semivol	latiles (mg/kg)	3 3.12				
Bis(2-chloroethoxy)methane		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Bis(2-chloroethyl)ether **	0.2	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Bis(2-ethylhexyl)phthalate	31,000	1.2	0.63	2.7	0.59 J	0.39 U		
4-Bromophenyl phenyl ether		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Butyl benzyl phthalate	930	0.35 U	0.36 U	0.58	0.38 U	0.39 U		
Carbazole		0.35 U	3.2	0.53	0.91 J	0.39 U		
4-Chloro-3-methylphenol		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
4-Chloroaniline		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2-Chloronaphthalene		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2-Chlorophenol	53,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
4-Chlorophenyl phenyl ether		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Dibenzofuran		0.35 U	0.94	0.38 U	0.9 J	0.39 U		
1,2-Dichlorobenzene	560	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
1,3-Dichlorobenzene +	570	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
1,4-Dichlorobenzene	11,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
3,3'-Dichlorobenzidine		0.7 U	0.72 U	0.75 U	0.75 U	0.78 U		
2,4-Dichlorophenol		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Diethyl phthalate	2,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Dimethyl phthalate +	1,300	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Di-n-butyl phthalate	2,300	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2,4-Dimethylphenol		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
4,6-Dinitro-2-methylphenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
2,4-Dinitrophenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
2,4-Dinitrotoluene		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2,6-Dinitrotoluene		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Di-n-octyl phthalate	10,000	1.6	0.36 U	0.38 U	0.38 U	0.39 U		
Hexachlorobenzene	1	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Hexachlorobutadiene +	1,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Hexachlorocyclopentadiene	10	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Hexachloroethane		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
Isophorone	4,600	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2-Methylnaphthalene		0.47	20	0.59	2.3 J	0.39 U		
2-Methylphenol		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
4-Methylphenol		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2-Nitroaniline +	73	1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
3-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
4-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
Nitrobenzene	92	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2-Nitrophenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
4-Nitrophenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
N-Nitrosodi-n-propylamine		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
N-Nitrosodiphenylamine		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2, 2'-Oxybis(1-Chloropropane)		0.015 U	0.015 U	0.016 U	0.38 U	0.39 U		
Pentachlorophenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U		
Phenol		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
1,2,4-Trichlorobenzene	3,200	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		
2,4,5-Trichlorophenol		0.7 U	0.72 U	0.75 U	0.75 U	0.78 U		
2,4,6-Trichlorophenol	200	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U		

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) J Indicates an estimated value.
- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
- (7) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- $(8)\ Soil\ samples\ (SP10-001,SP18B-002,SB21-002,SB22-001,SB23-003,SB24-002,SB26-001,SP40-001,SB45-002,SB50-001,SB57-001,and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample l	Location and Dept	h (feet below grou	nd surface)/Conce	ntration
	Screening	SB18B-001	SB19-001	SB20-001	SB21-001	SB22-002
Compound/Analyte	Level (mg/kg)	1-2	1-2	0-0.5	1-2	8-10
		PAHs ((mg/kg)			
Acenaphthene		0.19	3.1	0.31	3.3 J	0.031
Acenaphthylene		0.12	2.3	0.19	2.5 J	0.029 U
Anthracene		0.67	3.1	0.78	5 J	0.047
Benzo(a)anthracene		0.31	1.4	0.26	1.6 J	0.029 U
Benzo(b)fluoranthene		0.57	3.4	2	3.1 J	0.029 U
Benzo(k)fluoranthene		0.6	3	1.9	3.5 J	0.029 U
Benzo(g,h,i)perylene		0.8	3	0.89	3.7 J	0.029 U
Benzo(a)pyrene		0.41	2.7	0.67	4 J	0.029 U
Chrysene		1.7	5.4	1.4	5.6 J	0.04
Dibenzo(a,h)anthracene		0.25	1.3	0.3	1.1 J	0.029 U
Fluoranthene		1.2	7.4	2.4	8.1 J	0.029 U
Fluorene		0.3	3.2	0.31	3.6 J	0.033
Indeno(1,2,3-cd)pyrene		0.52	2.5	0.62	2.5 J	0.029 U
Naphthalene	170	0.42	13	0.47	2.4 J	0.2
Phenanthrene		1.9	9.7	2.5	13 J	0.13
Pyrene		1.8	8.9	1.9	14 J	0.029 U
		PCBs (
Aroclor 1016		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U
Aroclor 1221		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U
Aroclor 1232		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U
Aroclor 1242		1.9	0.55	1.3	0.1	0.094 U
Aroclor 1248		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U
Aroclor 1254		1.6	0.52	0.91 U	0.18 U	0.19 U
Aroclor 1260		0.17 U	0.17 U	0.18 U	0.18 U	0.19 U
Total PCBs		4.010	1.588	2.754	0.824	0.850 U
	Priority	Pollutant Metals a	and Total Cyanide	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
Antimony		1 J	0.98 J	1 J	0.97 UJ	1.1 UJ
Arsenic	750	4	2.5	4.3	6.9	5.7 J
Barium	690,000	99 J	69 J	150 J	76 J	34 J
Beryllium	1,300	0.79	0.5	0.87	0.48 U	0.57 U
Cadmium	1,800	1.1	0.44	1.3	0.89	0.57 U
Chromium	270	12 J	9.2 J	15 J	15 J	18 J
Copper		67 J	33 J	37 J	48 J	26 J
Lead		130 J	46 J	94 J	120 J	22
Mercury	10	0.2	0.1	0.53	0.33	0.029
Nickel	13,000	11 J	12 J	14 J	22 J	31 J
Selenium		0.93 U	0.82 U	1 U	0.97 U	1.1 U
Silver		0.93 U	0.82 U	1 U	0.97 U	1.1 U
Thallium		1.2	1.1	1.5	0.97 U	1.2
Zinc		240 J	98 J	210 J	150 J	46 J
Total Cyanide		0.26 U	0.25 U	0.32 U	0.3 U	0.3 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit. (5) PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ J - Indicates an estimated value.

 $^{(7)\} Soil\ samples\ (SP10-001,SP18B-002,SB21-002,SB22-001,SB23-003,SB24-002,SB26-001,SP40-001,SB45-002,SB50-001,SB57-001,and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003
Compound/Analyte	Level (mg/kg)	1-2	1-2	1-2	3-5	12-14
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.056 U	0.056 U	0.12	0.11	0.058 U
Benzene	0.8	0.011 U	0.011 U	1.5	0.22	0.012 U
Bromodichloromethane	3,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Bromoform	53	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Bromomethane	10	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
2-Butanone		0.022 U	0.022 U	0.026	0.034 U	0.023 U
Carbon Disulfide	720	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Carbon Tetrachloride	0.3	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Chlorobenzene	130	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Chloroethane +	1,500	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
Chloroform	0.3	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Chloromethane +	110	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Dibromochloromethane	1,300	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1-Dichloroethane	1,300	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,2-Dichloroethane	0.4	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1-Dichloroethene	1,500	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
cis-1,2-Dichloroethene	1,200	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
trans-1,2-Dichloroethene	3,100	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,2-Dichloropropane	15	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
cis-1,3-Dichloropropene	1.1	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
trans-1,3-Dichloropropene	1.1	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Ethylbenzene	400	0.011 U	0.016	2.8	4.6	0.012 U
2-Hexanone +	70	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
4-Methyl-2-Pentanone		0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
Methylene Chloride	13	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1,2,2-Tetrachloroethane +	2,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Tetrachloroethene	11	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Toluene	650	0.011 U	0.011 U	0.03	0.54	0.012 U
1,1,1-Trichloroethane	1,200	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1,2-Trichloroethane	1,800	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Trichloroethene	5	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Vinyl Chloride	0.28	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
m,p-Xylene*	320	0.011 U	0.011 U	0.068	6.7	0.012 U
o-Xylene*	320	0.011 U	0.011 U	0.72	6.8	0.012 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- NOTES: (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) Shaded value exceeds Tier 1 screening level.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou		
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003
Compound/Analyte	Level (mg/kg)	1-2	1-2	1-2	3-5	12-14
		TCL Semivol	latiles (mg/kg)			
Bis(2-chloroethoxy)methane		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Bis(2-chloroethyl)ether **	0.2	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Bis(2-ethylhexyl)phthalate	31,000	2.1	1.7 U	0.36 U	1.2	0.42
4-Bromophenyl phenyl ether		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Butyl benzyl phthalate	930	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Carbazole		1.8 U	4.1	1.9	5.7	0.4 U
4-Chloro-3-methylphenol		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
4-Chloroaniline		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2-Chloronaphthalene		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2-Chlorophenol	53,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
4-Chlorophenyl phenyl ether		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Dibenzofuran		1.8 U	1.7 U	0.84	4.7	0.4 U
1,2-Dichlorobenzene	560	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
1,3-Dichlorobenzene +	570	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
1,4-Dichlorobenzene	11,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
3,3´-Dichlorobenzidine		3.7 U	3.5 U	0.72 U	0.81 U	0.8 U
2,4-Dichlorophenol		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Diethyl phthalate	2,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Dimethyl phthalate +	1,300	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Di-n-butyl phthalate	2,300	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2,4-Dimethylphenol		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
4,6-Dinitro-2-methylphenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U
2,4-Dinitrophenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U
2,4-Dinitrotoluene		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2,6-Dinitrotoluene		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Di-n-octyl phthalate	10,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Hexachlorobenzene **	1	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Hexachlorobutadiene +	1,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Hexachlorocyclopentadiene	10	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Hexachloroethane		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Isophorone	4,600	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2-Methylnaphthalene		1.8 U	1.7 U	4.1	58	0.4
2-Methylphenol		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
4-Methylphenol		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2-Nitroaniline +	73	8.9 U	8.4 U	1.7 U	2 U	1.9 U
3-Nitroaniline		8.9 U	8.4 U	1.7 U	2 U	1.9 U
4-Nitroaniline		8.9 U	8.4 U	1.7 U	2 U	1.9 U
Nitrobenzene	92	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2-Nitrophenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U
4-Nitrophenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U
N-Nitrosodi-n-propylamine		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
N-Nitrosodiphenylamine		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2, 2'-Oxybis(1-Chloropropane)		0.078 U	0.073 U	0.015 U	0.017 U	0.017 U
Pentachlorophenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U
Phenol		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
1,2,4-Trichlorobenzene	3,200	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2,4,5-Trichlorophenol		3.7 U	3.5 U	0.72 U	0.81 U	0.8 U
2,4,6-Trichlorophenol	200	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dept	h (feet below grou	nd surface)/Conce	ntration
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003
Compound/Analyte	Level (mg/kg)	1-2	1-2	1-2	3-5	12-14
		PAHs ((mg/kg)		•	-
Acenaphthene		2.1	0.63	8.3	19	0.03 U
Acenaphthylene		5	0.34	6.1	8.9	0.03 U
Anthracene		4.1	2.1	8.1	16	0.03 U
Benzo(a)anthracene		5.9	0.29	8	14	0.03 U
Benzo(b)fluoranthene		3.1	1.5	4	7	0.03 U
Benzo(k)fluoranthene		3.2	1.3	3.3	7	0.03 U
Benzo(g,h,i)perylene		1.6	1.5	2.3	3.7	0.03 U
Benzo(a)pyrene		5	1.7	5.1	9.2	0.03 U
Chrysene		6.6	3.6	9.1	15	0.03 U
Dibenzo(a,h)anthracene		1.4 U	0.72	0.84	0.94	0.03 U
Fluoranthene		9.4	6.4	16	20	0.03 U
Fluorene		2.4	0.67	7	26	0.067
Indeno(1,2,3-cd)pyrene		1.4 U	1.4	2.1	3.1 U	0.03 U
Naphthalene	170	1.8	0.65	6.7	28	0.6
Phenanthrene		10	5.4	30	62	0.15
Pyrene		14	7	24	32	0.03 U
		PCBs (
Aroclor 1016		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U
Aroclor 1221		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U
Aroclor 1232		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U
Aroclor 1242		0.95	1.1	0.086 U	0.098 U	0.096 U
Aroclor 1248		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U
Aroclor 1254		0.72	0.9	0.17 U	0.2 U	0.19 U
Aroclor 1260		0.18 U	0.17 U	0.17 U	0.2 U	0.19 U
Total PCBs		2.206	2.518	0.770 U	0.890 U	0.860 U
	Priority		and Total Cyanide	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
Antimony		1.1 J	1.1 J	1.1 UJ	1.1 UJ	1.1 UJ
Arsenic	750	5	2.5	3.2	7.8 J	11 J
Barium	690,000	98 J	110 J	130 J	92 J	110 J
Beryllium	1,300	0.76	0.62	0.76	1.3	1.2
Cadmium	1,800	0.88	1.2	0.59	0.56 U	0.57 U
Chromium	270	10 J	13 J	7.8 J	17 J	18 J
Copper		41 J	60 J	18 J	25 J	26 J
Lead		140 J	150 J	61 J	58	17
Mercury	10	0.21	0.2	0.17	0.35	0.03 U
Nickel	13,000	13 J	12 J	6.9 J	29 J	28 J
Selenium		0.99 U	0.96 U	1.1 U	1.1 U	1.1 U
Silver		0.99 U	0.96 U	1.1 U	1.1 U	1.1 U
Thallium		1.4	1.3	1.4	1.8	1.9
Zinc		120 J	270 J	73 J	58 J	41 J
Total Cyanide		0.28 U	0.22 U	0.27 U	0.26 U	0.31 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit. (5) PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ J - Indicates an estimated value.

 $^{(7)\} Soil\ samples\ (SP10-001,SP18B-002,SB21-002,SB22-001,SB23-003,SB24-002,SB26-001,SP40-001,SB45-002,SB50-001,SB57-001,and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dep	th (feet below grou	and surface)/Conce	entration
	Screening	SB27-001	SB27-002	SB28-001	SB28-002	SB29-001
Compound/Analyte	Level (mg/kg)	5-7	10-12	2-3	5-7	3-5
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.046	0.035 U	0.093	0.048	0.055 U
Benzene	0.8	0.0084 U	0.0069 U	0.041	0.0076 U	0.011 U
Bromodichloromethane	3,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Bromoform	53	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Bromomethane	10	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
2-Butanone		0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Carbon Disulfide	720	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Carbon Tetrachloride	0.3	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chlorobenzene	130	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chloroethane +	1,500	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Chloroform	0.3	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chloromethane +	110	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Dibromochloromethane	1,300	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1-Dichloroethane	1,300	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,2-Dichloroethane	0.4	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1-Dichloroethene	1,500	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
cis-1,2-Dichloroethene	1,200	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
trans-1,2-Dichloroethene	3,100	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,2-Dichloropropane	15	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
cis-1,3-Dichloropropene	1.1	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
trans-1,3-Dichloropropene	1.1	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Ethylbenzene	400	0.0084 U	0.0069 U	0.059	0.0076 U	0.011 U
2-Hexanone +	70	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
4-Methyl-2-Pentanone		0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Methylene Chloride	13	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,2,2-Tetrachloroethane +	2,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Tetrachloroethene	11	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Toluene	650	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,1-Trichloroethane	1,200	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,2-Trichloroethane	1,800	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Trichloroethene	5	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Vinyl Chloride	0.28	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
m,p-Xylene*	320	0.0084 U	0.0069 U	0.012	0.0076 U	0.011 U
o-Xylene*	320	0.0084 U	0.0069 U	0.015	0.0076 U	0.011 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- NOTES: (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- $(8) \ Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)\\$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dept	h (feet below grou	nd surface)/Conce	entration
	Screening	SB27-001	SB27-002	SB28-001	SB28-002	SB29-001
Compound/Analyte	Level (mg/kg)	5-7	10-12	2-3	5-7	3-5
		TCL Semivol	latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Bis(2-chloroethyl)ether **	0.2	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Bis(2-ethylhexyl)phthalate	31,000	0.38 U	0.38 U	0.45	0.4 U	0.39 U
4-Bromophenyl phenyl ether		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Butyl benzyl phthalate	930	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Carbazole		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4-Chloro-3-methylphenol		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4-Chloroaniline		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Chloronaphthalene		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Chlorophenol	53,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4-Chlorophenyl phenyl ether		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Dibenzofuran		0.38 U	0.38 U	0.5	0.4 U	0.39 U
1,2-Dichlorobenzene	560	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
1,3-Dichlorobenzene +	570	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
1,4-Dichlorobenzene	11,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
3,3'-Dichlorobenzidine		0.76 U	0.76 U	0.78 U	0.79 U	0.78 U
2,4-Dichlorophenol		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Diethyl phthalate	2,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Dimethyl phthalate +	1,300	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Di-n-butyl phthalate	2,300	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2,4-Dimethylphenol		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4,6-Dinitro-2-methylphenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dinitrophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dinitrotoluene		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2,6-Dinitrotoluene		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Di-n-octyl phthalate	10,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Hexachlorobenzene	1	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Hexachlorobutadiene +	1,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Hexachlorocyclopentadiene	10	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Hexachloroethane		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Isophorone	4,600	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Methylnaphthalene		0.38 U	0.38 U	1.1	0.4 U	0.39 U
2-Methylphenol		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4-Methylphenol		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Nitroaniline +	73	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
3-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
Nitrobenzene	92	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Nitrophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitrophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodi-n-propylamine		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
N-Nitrosodiphenylamine		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Pentachlorophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
1,2,4-Trichlorobenzene	3,200	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2,4,5-Trichlorophenol		0.76 U	0.76 U	0.78 U	0.79 U	0.78 U
2,4,6-Trichlorophenol	200	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dept	h (feet below grou	nd surface)/Conce	ntration
	Screening	SB27-001	SB27-002	SB28-001	SB28-002	SB29-001
Compound/Analyte	Level (mg/kg)	5-7	10-12	2-3	5-7	3-5
		PAHs ((mg/kg)			
Acenaphthene		0.029 U	0.029 U	1.7	0.03 U	0.035
Acenaphthylene		0.029 U	0.029 U	1.4	0.03 U	0.029 U
Anthracene		0.029 U	0.029 U	3.5	0.03 U	0.038
Benzo(a)anthracene		0.029 U	0.029 U	1.1	0.03 U	0.029 U
Benzo(b)fluoranthene		0.029 U	0.029 U	1.8	0.03 U	0.029 U
Benzo(k)fluoranthene		0.029 U	0.029 U	1.9	0.03 U	0.029 U
Benzo(g,h,i)perylene		0.029 U	0.029 U	3	0.03 U	0.029 U
Benzo(a)pyrene		0.029 U	0.029 U	2.6	0.03 U	0.029 U
Chrysene		0.029 U	0.029 U	3.8	0.03 U	0.052
Dibenzo(a,h)anthracene		0.029 U	0.029 U	0.89	0.03 U	0.029 U
Fluoranthene		0.029 U	0.029 U	0.051	0.03 U	0.029
Fluorene		0.029 U	0.029 U	1.1	0.03 U	0.033
Indeno(1,2,3-cd)pyrene		0.029 U	0.029 U	1.9	0.03 U	0.029 U
Naphthalene	170	0.029 U	0.029 U	1.4	0.03 U	0.094
Phenanthrene		0.031	0.047	0.038	0.03 U	0.14
Pyrene		0.029 U	0.029 U	0.097	0.03 U	0.044
		PCBs (
Aroclor 1016		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U
Aroclor 1221		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U
Aroclor 1232		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U
Aroclor 1242		0.094 U	0.093 U	0.34	0.14	0.094 U
Aroclor 1248		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U
Aroclor 1254		0.19 U	0.19 U	0.2	0.19 U	0.19 U
Aroclor 1260		0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Total PCBs		0.850 U	0.845 U	1.102	0.904	0.850 U
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony		1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ
Arsenic	750	7.1 J	7 J	6.1	9.2 J	11 J
Barium	690,000	32 J	39 J	67 J	41 J	41 J
Beryllium	1,300	0.53 U	0.55 U	0.55 U	0.57 U	0.57 U
Cadmium	1,800	0.53 U	0.55 U	0.71	0.57 U	0.57 U
Chromium	270	16 J	17 J	14 J	18 J	18 J
Copper		39 J	29 J	42 J	27 J	30 J
Lead		20	19	120 J	31	23
Mercury	10	0.028 U	0.028 U	0.53	0.049	0.031
Nickel	13,000	31 J	30 J	20 J	33 J	38 J
Selenium		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Silver		12	1.1 U	1.1 U	1.1 U	1.1 U
Thallium		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Zinc		50 J	42 J	150 J	61 J	46 J
Total Cyanide		0.28 U	0.27 U	0.29 U	0.3 U	0.28 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit. (5) PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ J - Indicates an estimated value.

 $^{(7)\} Soil\ samples\ (SP10-001,SP18B-002,SB21-002,SB22-001,SB23-003,SB24-002,SB26-001,SP40-001,SB45-002,SB50-001,SB57-001,and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dep	th (feet below grou	and surface)/Conce	entration
	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002
Compound/Analyte	Level (mg/kg)	12-14	2-3	6-8	2-3	3-5
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.067 U	0.03	0.064 U	0.067 U	0.081 U
Benzene	0.8	0.013 U	0.024	0.013 U	5.2	0.77
Bromodichloromethane	3,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Bromoform	53	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Bromomethane	10	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
2-Butanone		0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Carbon Disulfide	720	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Carbon Tetrachloride	0.3	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chlorobenzene	130	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chloroethane +	1,500	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Chloroform	0.3	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chloromethane +	110	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Dibromochloromethane	1,300	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1-Dichloroethane	1,300	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,2-Dichloroethane	0.4	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1-Dichloroethene	1,500	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
cis-1,2-Dichloroethene	1,200	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
trans-1,2-Dichloroethene	3,100	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,2-Dichloropropane	15	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
cis-1,3-Dichloropropene	1.1	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
trans-1,3-Dichloropropene	1.1	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Ethylbenzene	400	0.013 U	0.038	0.013 U	1.5	2
2-Hexanone +	70	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
4-Methyl-2-Pentanone		0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Methylene Chloride	13	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1,2,2-Tetrachloroethane +	2,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Tetrachloroethene	11	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Toluene	650	0.013 U	0.032	0.013 U	0.77	0.016 U
1,1,1-Trichloroethane	1,200	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1,2-Trichloroethane	1,800	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Trichloroethene	5	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Vinyl Chloride	0.28	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
m,p-Xylene*	320	0.013 U	0.047	0.013 U	0.62	0.057
o-Xylene*	320	0.013 U	0.029	0.013 U	0.47	0.034
Xylenes, Total	320	NA	NA	NA	NA	NA

- NOTES: (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) Shaded value exceeds Tier 1 screening level.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tr: 4 11	g 1	T	1. (6 (11.	. 1	
	Tier 1			h (feet below grou		
	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002
Compound/Analyte	Level (mg/kg)	12-14	2-3	6-8	2-3	3-5
	11 11		latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Bis(2-chloroethyl)ether **	0.2	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	0.33 U	0.37 U	0.99	0.87
4-Bromophenyl phenyl ether		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Butyl benzyl phthalate	930	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Carbazole		0.39 U	0.33 U	0.37 U	0.46	1.3
4-Chloro-3-methylphenol		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
4-Chloroaniline		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Chloronaphthalene		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Chlorophenol	53,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
4-Chlorophenyl phenyl ether		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Dibenzofuran		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
1,2-Dichlorobenzene	560	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
1,3-Dichlorobenzene +	570	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
1,4-Dichlorobenzene	11,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
3,3´-Dichlorobenzidine		0.78 U	0.33 U	0.74 U	0.66 U	0.78 U
2,4-Dichlorophenol		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Diethyl phthalate	2,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Dimethyl phthalate +	1,300	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Di-n-butyl phthalate	2,300	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2,4-Dimethylphenol		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
4,6-Dinitro-2-methylphenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
2,4-Dinitrophenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
2,4-Dinitrotoluene		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2,6-Dinitrotoluene		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Di-n-octyl phthalate	10,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Hexachlorobenzene	1	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Hexachlorobutadiene +	1,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Hexachlorocyclopentadiene	10	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Hexachloroethane	4.600	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Isophorone	4,600	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Methylnaphthalene		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Methylphenol		0.39 U 0.39 U	0.33 U 0.33 U	0.37 U 0.37 U	0.33 U 0.33 U	0.39 U 0.39 U
4-Methylphenol 2-Nitroaniline +	73	0.39 U 1.9 U	0.33 U 1.7 U	0.37 U 1.8 U	0.33 U 1.6 U	1.9 U
2-Nitroaniline + 3-Nitroaniline		1.9 U 1.9 U		1.8 U	1.6 U	1.9 U
3-Nitroaniline 4-Nitroaniline		1.9 U 1.9 U	1.7 U 1.7 U	1.8 U 1.8 U	1.6 U 1.6 U	1.9 U 1.9 U
4-Nitroaniline Nitrobenzene	92	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Nitrophenol	92	1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
4-Nitrophenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
N-Nitrosodi-n-propylamine		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
N-Nitrosodiphenylamine		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.39 U	0.33 U	0.016 U	0.014 U	0.017 U
Pentachlorophenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
Phenol	 	0.39 U	15	0.37 U	0.33 U	0.39 U
1,2,4-Trichlorobenzene	3,200	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2,4,5-Trichlorophenol	3,200	0.39 U	0.66 U	0.37 U	0.66 U	0.39 U
2,4,6-Trichlorophenol	200	0.78 U	0.33 U	0.74 U	0.33 U	0.78 U
NOTES:	200	0.37 0	0.55 0	0.57 0	0.55 0	0.37 0

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample l	Location and Dept	h (feet below grou	nd surface)/Conce	ntration
	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002
Compound/Analyte	Level (mg/kg)	12-14	2-3	6-8	2-3	3-5
		PAHs ((mg/kg)			
Acenaphthene		0.029 U	0.44	0.028 U	0.8	0.84
Acenaphthylene		0.029 U	0.13 U	0.029	1.2	0.99
Anthracene		0.029 U	0.7	0.047	1.5	0.98
Benzo(a)anthracene		0.029 U	0.2	0.028 U	2.7	1.8
Benzo(b)fluoranthene		0.029 U	0.84	0.028 U	1.2	0.87
Benzo(k)fluoranthene		0.029 U	0.48	0.028 U	0.76	0.75
Benzo(g,h,i)perylene		0.029 U	1.5	0.028 U	0.61	0.38
Benzo(a)pyrene		0.029 U	0.91	0.028 U	1.7	1.1
Chrysene		0.029 U	1.5	0.075	2.5	1.7
Dibenzo(a,h)anthracene		0.029 U	0.13 U	0.028 U	0.25 U	0.3 U
Fluoranthene		0.029 U	0.67	0.075	3.4	2.8
Fluorene		0.029 U	0.53	0.03	1	0.87
Indeno(1,2,3-cd)pyrene		0.029 U	1.1	0.028 U	0.56	0.34
Naphthalene	170	0.029 U	0.68	0.11	0.25 U	2.1
Phenanthrene		0.036	2	0.17	3.8	3.7
Pyrene		0.029 U	1.1	0.13	4.6	4
		PCBs (
Aroclor 1016		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1221		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1232		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1242		0.095 U	3.7	0.093 U	1.3	0.15
Aroclor 1248		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1254		0.19 U	1.8	0.19 U	1.1	0.19 U
Aroclor 1260		0.19 U	0.17 U	0.19 U	0.17 U	0.19 U
Total PCBs		0.855 U	6.002	0.845 U	2.910	0.902
	Priority	Pollutant Metals a		(mg/kg)		
Antimony		1.1 UJ	1 UJ	1.1 UJ	1.1 J	1.1 J
Arsenic	750	7.2 J	5	12 J	4.8	3.4 J
Barium	690,000	38 J	43 J	31 J	110 J	80 J
Beryllium	1,300	0.55 U	0.62	0.93	1	0.9
Cadmium	1,800	0.55 U	1.2	0.55 U	1.2	0.7
Chromium	270	17 J	16 J	19 J	29 J	13 J
Copper		27 J	33 J	29 J	91 J	35 J
Lead		18	120 J	18	190 J	65
Mercury	10	0.032	0.25	0.037	0.21	0.052
Nickel	13,000	32 J	18 J	31 J	18 J	11 J
Selenium		1.1 U	1 U	1.1 U	0.98 U	1.1 U
Silver		1.1 U	1 U	1.1 U	0.98 U	1.1 U
Thallium		1.1 U	1 U	1.2	1.3	1.5
Zinc		50 J	200 J	45 J	260 J	88 J
Total Cyanide		0.29 U	0.24 U	0.27 U	0.25 U	0.27 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit. (5) PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ J - Indicates an estimated value.

 $^{(7)\} Soil\ samples\ (SP10-001,SP18B-002,SB21-002,SB22-001,SB23-003,SB24-002,SB26-001,SP40-001,SB45-002,SB50-001,SB57-001,and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.042 U	0.12	0.064 U	0.041 U	0.14
Benzene	0.8	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromodichloromethane	3,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromoform	53	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromomethane	10	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
2-Butanone		0.017 U	0.027	0.026 U	0.017 U	0.024 U
Carbon Disulfide	720	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Carbon Tetrachloride	0.3	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chlorobenzene	130	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chloroethane +	1,500	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Chloroform	0.3	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chloromethane +	110	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Dibromochloromethane	1,300	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1-Dichloroethane	1,300	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,2-Dichloroethane	0.4	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1-Dichloroethene	1,500	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
cis-1,2-Dichloroethene	1,200	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
trans-1,2-Dichloroethene	3,100	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,2-Dichloropropane	15	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
cis-1,3-Dichloropropene	1.1	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
trans-1,3-Dichloropropene	1.1	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Ethylbenzene	400	0.01	0.012 U	0.013 U	0.015	0.012 U
2-Hexanone +	70	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
4-Methyl-2-Pentanone		0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Methylene Chloride	13	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1,2,2-Tetrachloroethane +	2,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Tetrachloroethene	11	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Toluene	650	0.0084 U	0.012 U	0.013 U	0.013	0.012 U
1,1,1-Trichloroethane	1,200	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1,2-Trichloroethane	1,800	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Trichloroethene	5	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Vinyl Chloride	0.28	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
m,p-Xylene*	320	0.0084 U	0.012 U	0.013 U	0.043	0.012 U
o-Xylene*	320	0.0084 U	0.025	0.013 U	0.033	0.012 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- NOTES: (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- $(8) \ Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)\\$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002	
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7	
	(88)	TCL Semivol	latiles (mg/kg)	<u> </u>	_		
Bis(2-chloroethoxy)methane		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Bis(2-chloroethyl)ether **	0.2	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Bis(2-ethylhexyl)phthalate	31,000	2 U	0.4 U	0.39 U	2	0.4 U	
4-Bromophenyl phenyl ether		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Butyl benzyl phthalate	930	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Carbazole		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
4-Chloro-3-methylphenol		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
4-Chloroaniline		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2-Chloronaphthalene		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2-Chlorophenol	53,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
4-Chlorophenyl phenyl ether		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Dibenzofuran		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
1,2-Dichlorobenzene	560	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
1,3-Dichlorobenzene +	570	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
1,4-Dichlorobenzene	11,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
3,3'-Dichlorobenzidine		4.1 U	0.81 U	0.79 U	3.5 U	0.8 U	
2,4-Dichlorophenol		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Diethyl phthalate	2,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Dimethyl phthalate +	1,300	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Di-n-butyl phthalate	2,300	6.3	0.4 U	0.39 U	1.8 U	0.4 U	
2,4-Dimethylphenol		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
4,6-Dinitro-2-methylphenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U	
2,4-Dinitrophenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U	
2,4-Dinitrotoluene		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2,6-Dinitrotoluene		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Di-n-octyl phthalate	10,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Hexachlorobenzene **	1	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Hexachlorobutadiene +	1,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Hexachlorocyclopentadiene	10	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Hexachloroethane		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
Isophorone	4,600	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2-Methylnaphthalene		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2-Methylphenol		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
4-Methylphenol		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2-Nitroaniline +	73	9.9 U	2 U	1.9 U	8.6 U	1.9 U	
3-Nitroaniline		9.9 U	2 U	1.9 U	8.6 U	1.9 U	
4-Nitroaniline		9.9 U	2 U	1.9 U	8.6 U	1.9 U	
Nitrobenzene	92	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2-Nitrophenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U	
4-Nitrophenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U	
N-Nitrosodi-n-propylamine		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
N-Nitrosodiphenylamine		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2, 2'-Oxybis(1-Chloropropane)		0.087 U	0.017 U	0.017 U	0.075 U	0.017 U	
Pentachlorophenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U	
Phenol		2 U	0.4 U	0.39 U	1.8 U	0.4 U	
1,2,4-Trichlorobenzene	3,200	2 U	0.4 U	0.39 U	1.8 U	0.4 U	
2,4,5-Trichlorophenol	<u> </u>	4.1 U	0.81 U	0.79 U	3.5 U	0.8 U	
2,4,6-Trichlorophenol NOTES:	200	2 U	0.4 U	0.39 U	1.8 U	0.4 U	

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dept	h (feet below grou	nd surface)/Conce	ntration
	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7
		PAHs ((mg/kg)			
Acenaphthene		1.5 U	0.031 U	0.03 U	0.13 U	0.12
Acenaphthylene		1.6	0.031 U	0.03 U	0.19	0.086
Anthracene		1.8	0.031 U	0.03 U	0.36	0.17
Benzo(a)anthracene		2.8	0.031 U	0.03 U	0.13 U	0.094
Benzo(b)fluoranthene		1.7	0.031 U	0.03 U	0.24	0.13
Benzo(k)fluoranthene		1.5 U	0.031 U	0.03 U	0.24	0.14
Benzo(g,h,i)perylene		1.5 U	0.031 U	0.03 U	0.57	0.36
Benzo(a)pyrene		1.8	0.031 U	0.03 U	0.13	0.14
Chrysene		3.2	0.031 U	0.041	0.75	0.39
Dibenzo(a,h)anthracene		1.5 U	0.031 U	0.03 U	0.13 U	0.11
Fluoranthene		3.7	0.031 U	0.039	0.21	0.33
Fluorene		1.5 U	0.031 U	0.03 U	0.13 U	0.31
Indeno(1,2,3-cd)pyrene		1.5 U	0.031 U	0.03 U	0.29	0.24
Naphthalene	170	2.1	0.14	0.042	0.38	0.03 U
Phenanthrene		4.1	0.076	0.083	1.3	0.13
Pyrene		5.5	0.047	0.033	0.36	1.2
		PCBs (
Aroclor 1016		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U
Aroclor 1221		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U
Aroclor 1232		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U
Aroclor 1242		2.5	0.096 U	0.094 U	0.87 U	0.098 U
Aroclor 1248		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U
Aroclor 1254		2.2	0.19 U	0.19 U	1.7 U	0.2 U
Aroclor 1260		0.18 U	0.19 U	0.19 U	1.7 U	0.2 U
Total PCBs		5.232	0.860 U	0.850 U	7.750 U	0.890 U
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony		1.1 UJ	1.1 UJ	1.1 UJ	1 UJ	1.2 UJ
Arsenic	750	5.9	5.1 J	17 J	1.2	7.5 J
Barium	690,000	100 J	97 J	63 J	59 J	100 J
Beryllium	1,300	0.86	1.2	1	0.57	1.3
Cadmium	1,800	0.59	0.59	0.54 U	0.54	0.59 U
Chromium	270	11 J	17 J	16 J	5.1 J	21 J
Copper		43 J	31 J	55 J	6.8 J	28 J
Lead		140 J	17	30	25 J	19
Mercury	10	0.28	0.046	0.023 U	0.026 U	0.031 U
Nickel	13,000	12 J	26 J	30 J	7.4 J	33 J
Selenium		1.1 U	1.1 U	1.1 U	1 U	1.2 U
Silver		1.1 U	1.1 U	1.1 U	1 U	1.2 U
Thallium		1.5	1.9	2	1.3	2.1
Zinc		69 J	54 J	43 J	29 J	53 J
Total Cyanide		0.29 U	0.34 U	0.29 U	0.27 U	0.31 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit. (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- $(7)\ Soil\ samples\ (SP10-001,SP18B-002,SB21-002,SB22-001,SB23-003,SB24-002,SB26-001,SP40-001,SB45-002,SB50-001,SB57-001,and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dept	th (feet below grou	und surface)/Conce	entration
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.14	0.13	0.042 U	0.044 U	0.082
Benzene	0.8	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromodichloromethane	3,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromoform	53	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromomethane	10	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
2-Butanone		0.015	0.027	0.017 U	0.018 U	0.02 U
Carbon Disulfide	720	0.013	0.012 U	0.0084 U	0.0088 U	0.0099 U
Carbon Tetrachloride	0.3	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chlorobenzene	130	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chloroethane +	1,500	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Chloroform	0.3	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chloromethane +	110	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Dibromochloromethane	1,300	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1-Dichloroethane	1,300	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,2-Dichloroethane	0.4	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1-Dichloroethene	1,500	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
cis-1,2-Dichloroethene	1,200	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
trans-1,2-Dichloroethene	3,100	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,2-Dichloropropane	15	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
cis-1,3-Dichloropropene	1.1	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
trans-1,3-Dichloropropene	1.1	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Ethylbenzene	400	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
2-Hexanone +	70	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
4-Methyl-2-Pentanone		0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Methylene Chloride	13	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,2,2-Tetrachloroethane +	2,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Tetrachloroethene	11	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Toluene	650	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,1-Trichloroethane	1,200	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,2-Trichloroethane	1,800	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Trichloroethene	5	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Vinyl Chloride	0.28	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
m,p-Xylene*	320	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
o-Xylene*	320	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- NOTES: (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- $(8) \ Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)\\$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002	
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9	
		TCL Semivol	latiles (mg/kg)	•			
Bis(2-chloroethoxy)methane		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Bis(2-chloroethyl)ether **	0.2	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Bis(2-ethylhexyl)phthalate	31,000	5.6	0.39 U	0.39 U	0.42 U	0.39 U	
4-Bromophenyl phenyl ether		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Butyl benzyl phthalate	930	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Carbazole		0.47	0.39 U	0.39 U	0.67	0.39 U	
4-Chloro-3-methylphenol		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
4-Chloroaniline		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Chloronaphthalene		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Chlorophenol	53,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
4-Chlorophenyl phenyl ether		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Dibenzofuran		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
1,2-Dichlorobenzene	560	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
1,3-Dichlorobenzene +	570	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
1,4-Dichlorobenzene	11,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
3,3´-Dichlorobenzidine		0.71 U	0.79 U	0.77 U	0.85 U	0.77 U	
2,4-Dichlorophenol		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Diethyl phthalate	2,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Dimethyl phthalate +	1,300	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Di-n-butyl phthalate	2,300	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2,4-Dimethylphenol		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
4,6-Dinitro-2-methylphenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
2,4-Dinitrophenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
2,4-Dinitrotoluene		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2,6-Dinitrotoluene		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Di-n-octyl phthalate	10,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Hexachlorobenzene	1	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Hexachlorobutadiene +	1,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Hexachlorocyclopentadiene	10	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Hexachloroethane		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Isophorone	4,600	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Methylnaphthalene		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Methylphenol		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
4-Methylphenol		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Nitroaniline +	73	1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
3-Nitroaniline		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
4-Nitroaniline		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
Nitrobenzene	92	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Nitrophenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
4-Nitrophenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
N-Nitrosodi-n-propylamine		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
N-Nitrosodiphenylamine		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2, 2'-Oxybis(1-Chloropropane)		0.015 U	0.017 U	0.016 U	0.018 U	0.016 U	
Pentachlorophenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
Phenol		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
1,2,4-Trichlorobenzene	3,200	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2,4,5-Trichlorophenol		0.71 U	0.79 U	0.77 U	0.85 U	0.77 U	
2,4,6-Trichlorophenol NOTES:	200	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou		
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9
		PAHs ((mg/kg)			
Acenaphthene		0.11	0.03 U	0.029 U	0.13	0.029 U
Acenaphthylene		0.082	0.03 U	0.029 U	0.074	0.029 U
Anthracene		0.15	0.03 U	0.029 U	0.33	0.029 U
Benzo(a)anthracene		0.19	0.064	0.029 U	0.17	0.029 U
Benzo(b)fluoranthene		0.47	0.041	0.029 U	0.38	0.029 U
Benzo(k)fluoranthene		0.53	0.056	0.029 U	0.87	0.029 U
Benzo(g,h,i)perylene		0.57	0.037	0.029 U	0.35	0.029 U
Benzo(a)pyrene		0.33	0.072	0.029 U	0.32	0.029 U
Chrysene		0.71	0.066	0.029 U	1.1	0.029 U
Dibenzo(a,h)anthracene		0.076	0.03 U	0.029 U	0.19	0.029 U
Fluoranthene		0.55	0.074	0.029 U	2	0.029 U
Fluorene		0.086	0.03 U	0.029 U	0.12	0.029 U
Indeno(1,2,3-cd)pyrene		0.18	0.036	0.029 U	0.36	0.029 U
Naphthalene	170	0.16	0.03 U	0.029 U	0.18	0.056
Phenanthrene		0.7	0.03 U	0.029 U	1	0.029 U
Pyrene		0.63	0.074	0.029 U	2.1	0.029 U
			(mg/kg)		•	
Aroclor 1016		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1221		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1232		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1242		8.5	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1248		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U
Aroclor 1254		6	0.19 U	0.19 U	0.2 U	0.18 U
Aroclor 1260		0.17 U	0.19 U	0.19 U	0.2 U	0.18 U
Total PCBs		15.014	0.855 U	0.855 U	0.900 U	0.820 U
	Priority		and Total Cyanide	\ U U	•	
Antimony		6.5 J	1.1 UJ	1.1 UJ	1.2 UJ	0.97 UJ
Arsenic	750	20	5.8 J	12 J	7.2	15 J
Barium	690,000	520 J	98 J	89 J	120 J	98 J
Beryllium	1,300	1.4	0.83	1.1	1.1	1.2
Cadmium	1,800	8.1	0.56 U	0.56 U	0.72	0.53
Chromium	270	320 J	11 J	20 J	19 J	20 J
Copper		480 J	11 J	30 J	28 J	38 J
Lead		1400 J	36	25	61 J	22
Mercury	10	2.6	0.14	0.024 U	0.33	0.026 U
Nickel	13,000	210 J	12 J	35 J	26 J	38 J
Selenium		0.99 U	1.1 U	1.1 U	1.2 U	0.97 U
Silver		1	1.1 U	1.1 U	1.2 U	0.97 U
Thallium		1.3	2	2.2	2	2
Zinc		1600 J	40 J	49 J	73 J	46 J
Total Cyanide		0.28 U	0.29 U	0.24 U	0.35 U	0.25 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- (7) Shaded value exceeds Tier 1 screening level.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SP37-003	SB38-001	SP39-001	SP39-002	SP39-003
Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11
-		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.066 J	0.12 J	0.036 U	0.11	0.047 U
Benzene	0.8	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromodichloromethane	3,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromoform	53	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromomethane	10	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
2-Butanone		0.023 U	0.029 UJ	0.014 U	0.027	0.019 U
Carbon Disulfide	720	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Carbon Tetrachloride	0.3	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chlorobenzene	130	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chloroethane +	1,500	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Chloroform	0.3	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chloromethane +	110	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Dibromochloromethane	1,300	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1-Dichloroethane	1,300	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,2-Dichloroethane	0.4	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1-Dichloroethene	1,500	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
cis-1,2-Dichloroethene	1,200	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
trans-1,2-Dichloroethene	3,100	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,2-Dichloropropane	15	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
cis-1,3-Dichloropropene	1.1	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
trans-1,3-Dichloropropene	1.1	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Ethylbenzene	400	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
2-Hexanone +	70	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
4-Methyl-2-Pentanone		0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Methylene Chloride	13	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1,2,2-Tetrachloroethane +	2,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Tetrachloroethene	11	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Toluene	650	0.012 U	0.014 UJ	0.008	0.013 U	0.0094 U
1,1,1-Trichloroethane	1,200	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1,2-Trichloroethane	1,800	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Trichloroethene	5	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Vinyl Chloride	0.28	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
m,p-Xylene*	320	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
o-Xylene*	320	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- NOTES: (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) Shaded value exceeds Tier 1 screening level.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	A		h (feet below grou		
	Screening	SP37-003	SB38-001	SP39-001	SP39-002	SP39-003
Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11
			latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Bis(2-chloroethyl)ether **	0.2	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Bis(2-ethylhexyl)phthalate	31,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
4-Bromophenyl phenyl ether		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Butyl benzyl phthalate	930	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Carbazole		0.38 U	0.53	1.7 U	0.4 U	0.38 U
4-Chloro-3-methylphenol		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
4-Chloroaniline		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2-Chloronaphthalene		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2-Chlorophenol	53,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
4-Chlorophenyl phenyl ether		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Dibenzofuran		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
1,2-Dichlorobenzene	560	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
1,3-Dichlorobenzene +	570	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
1,4-Dichlorobenzene	11,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
3,3´-Dichlorobenzidine		0.75 U	0.83 U	3.5 U	0.8 U	0.77 U
2,4-Dichlorophenol		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Diethyl phthalate	2,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Dimethyl phthalate +	1,300	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Di-n-butyl phthalate	2,300	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2,4-Dimethylphenol		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
4,6-Dinitro-2-methylphenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U
2,4-Dinitrophenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U
2,4-Dinitrotoluene		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2,6-Dinitrotoluene		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Di-n-octyl phthalate	10,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Hexachlorobenzene **	1	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Hexachlorobutadiene +	1,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Hexachlorocyclopentadiene	10	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Hexachloroethane		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Isophorone	4,600	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2-Methylnaphthalene		0.38 U	1.7	1.7 U	0.4 U	0.38 U
2-Methylphenol		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
4-Methylphenol		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2-Nitroaniline +	73	1.8 U	2 U	8.4 U	1.9 U	1.9 U
3-Nitroaniline		1.8 U	2 U	8.4 U	1.9 U	1.9 U
4-Nitroaniline		1.8 U	2 U	8.4 U	1.9 U	1.9 U
Nitrobenzene	92	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2-Nitrophenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U
4-Nitrophenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U
N-Nitrosodi-n-propylamine		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
N-Nitrosodiphenylamine		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.018 U	0.074 U	0.017 U	0.016 U
Pentachlorophenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U
Phenol		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
1,2,4-Trichlorobenzene	3,200	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2,4,5-Trichlorophenol		0.75 U	0.83 U	3.5 U	0.8 U	0.77 U
2,4,6-Trichlorophenol	200	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dept	h (feet below grou	ind surface)/Conce	entration
	Screening	SP37-003	SB38-001	SP39-001	SP39-002	SP39-003
Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11
		PAHs	(mg/kg)		•	
Acenaphthene		0.028 U	0.42	1.3 U	0.056	0.029 U
Acenaphthylene		0.028 U	0.37	1.3 U	0.03 U	0.029 U
Anthracene		0.028 U	1.7	1.3 U	0.29	0.03
Benzo(a)anthracene		0.028 U	1.9	1.3 U	0.13	0.029 U
Benzo(b)fluoranthene		0.028 U	1.1	1.3 U	0.58	0.029 U
Benzo(k)fluoranthene		0.028 U	0.96	1.3 U	0.65	0.029 U
Benzo(g,h,i)perylene		0.028 U	0.46	1.3 U	0.31	0.029 U
Benzo(a)pyrene		0.028 U	0.89	1.3 U	0.64	0.029 U
Chrysene		0.028 U	2.3	1.3 U	1.1	0.056
Dibenzo(a,h)anthracene		0.028 U	0.15	1.3 U	0.23	0.029 U
Fluoranthene		0.028 U	4.1	1.3 U	1.6	0.081
Fluorene		0.028 U	0.7	1.3 U	0.056	0.029 U
Indeno(1,2,3-cd)pyrene		0.028 U	0.38	1.3 U	0.3 U	0.029 U
Naphthalene	170	0.028 U	2	1.3 U	0.032	0.029 U
Phenanthrene		0.028 U	5.7	1.3	0.81	0.071
Pyrene		0.028 U	4.7	2	1.7	0.076
			(mg/kg)			
Aroclor 1016		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U
Aroclor 1221		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U
Aroclor 1232		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U
Aroclor 1242		0.092 U	0.1 U	0.087 U	0.1 U	0.14
Aroclor 1248		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U
Aroclor 1254		0.18 U	0.2 U	0.17 U	0.2 U	0.19 U
Aroclor 1260		0.18 U	0.2 U	0.17 U	0.2 U	0.19 U
Total PCBs		0.820 U	0.900 U	0.775 U	0.900 U	0.900
			and Total Cyanide	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
Antimony		1.2 UJ	1.3 UJ	1.1 UJ	6 J	1 UJ
Arsenic	750	7.7 J	7.7 J	1.7	10 J	8.1 J
Barium	690,000	85 J	49 J	57 J	140 J	83 J
Beryllium	1,300	1.1	1.1	0.59	1.1	1.1
Cadmium	1,800	0.59 U	0.69	0.95	1	0.51 U
Chromium	270	19 J	22 J	5.6 J	11 J	19 J
Copper		25 J	33 J	9.1 J	59 J	30 J
Lead		17	40	23 J	970	19
Mercury	10	0.029 U	0.051	0.025 U	6.2	0.027
Nickel	13,000	25 J	28 J	8.8 J	13 J	29 J
Selenium		1.2 U	1.3 U	1.1 U	1.1 U	1 U
Silver		1.2 U	1.3 U	1.1 U	1.1 U	1 U
Thallium		1.8	1.5	1.4	1.6	1.9
Zinc		37 J	88 J	33 J	200 J	40 J
Total Cyanide NOTES:		0.31 U	0.33 U	0.28 U	0.31 U	0.3 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

⁽⁵⁾ PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ J - Indicates an estimated value.

 $^{(7)\} Soil\ samples\ (SP10-001,SP18B-002,SB21-002,SB22-001,SB23-003,SB24-002,SB26-001,SP40-001,SB45-002,SB50-001,SB57-001,and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample	Location and Dept	th (feet below grou	ind surface)/Conce	entration
	Screening	SP40-002	SP40-003	SP43-001	SP43-002	SP43-003
Compound/Analyte	Level (mg/kg)	7-8	14-15	2-3	3.5-4.5	11-12
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.071	0.043 U	0.15	0.063 U	0.041 U
Benzene	0.8	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromodichloromethane	3,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromoform	53	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromomethane	10	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
2-Butanone		0.02 U	0.017 U	0.031	0.025 U	0.017 U
Carbon Disulfide	720	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Carbon Tetrachloride	0.3	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chlorobenzene	130	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chloroethane +	1,500	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Chloroform	0.3	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chloromethane +	110	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Dibromochloromethane	1,300	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1-Dichloroethane	1,300	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,2-Dichloroethane	0.4	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1-Dichloroethene	1,500	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
cis-1,2-Dichloroethene	1,200	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
trans-1,2-Dichloroethene	3,100	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,2-Dichloropropane	15	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
cis-1,3-Dichloropropene	1.1	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
trans-1,3-Dichloropropene	1.1	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Ethylbenzene	400	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
2-Hexanone +	70	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
4-Methyl-2-Pentanone		0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Methylene Chloride	13	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,2,2-Tetrachloroethane +	2,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Tetrachloroethene	11	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Toluene	650	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,1-Trichloroethane	1,200	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,2-Trichloroethane	1,800	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Trichloroethene	5	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Vinyl Chloride	0.28	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
m,p-Xylene*	320	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
o-Xylene*	320	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- NOTES: (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- $(8) \ Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)\\$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dept	h (feet below grou		
	Screening	SP40-002	SP40-003	SP43-001	SP43-002	SP43-003
Compound/Analyte	Level (mg/kg)	7-8	14-15	2-3	3.5-4.5	11-12
			latiles (mg/kg)		•	
Bis(2-chloroethoxy)methane		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Bis(2-chloroethyl)ether **	0.2	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Bromophenyl phenyl ether		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Butyl benzyl phthalate	930	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Carbazole		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Chloro-3-methylphenol		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Chloroaniline		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Chloronaphthalene		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Chlorophenol	53,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Chlorophenyl phenyl ether		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Dibenzofuran		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
1,2-Dichlorobenzene	560	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
1,3-Dichlorobenzene +	570	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
1,4-Dichlorobenzene	11,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
3,3´-Dichlorobenzidine		0.77 U	0.77 U	0.85 U	0.78 U	0.78 U
2,4-Dichlorophenol		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Diethyl phthalate	2,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Dimethyl phthalate +	1,300	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Di-n-butyl phthalate	2,300	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2,4-Dimethylphenol		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4,6-Dinitro-2-methylphenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
2,4-Dinitrophenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
2,4-Dinitrotoluene		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2,6-Dinitrotoluene		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Di-n-octyl phthalate	10,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Hexachlorobenzene	1	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Hexachlorobutadiene +	1,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Hexachlorocyclopentadiene	10	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Hexachloroethane		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Isophorone	4,600	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Methylnaphthalene		0.39 U	0.39 U	0.43 U	1.6	0.39 U
2-Methylphenol		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Methylphenol		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Nitroaniline +	73	1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
3-Nitroaniline		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
4-Nitroaniline		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
Nitrobenzene	92	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Nitrophenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
4-Nitrophenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
N-Nitrosodi-n-propylamine		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
N-Nitrosodiphenylamine		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.018 U	0.016 U	0.016 U
Pentachlorophenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
Phenol		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
1,2,4-Trichlorobenzene	3,200	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2,4,5-Trichlorophenol		0.77 U	0.77 U	0.85 U	0.78 U	0.78 U
2,4,6-Trichlorophenol	200	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration					
	Screening	SP40-002	SP40-003	SP43-001	SP43-002	SP43-003	
Compound/Analyte	Level (mg/kg)	7-8	14-15	2-3	3.5-4.5	11-12	
		PAHs ((mg/kg)				
Acenaphthene		0.029 U	0.029 U	0.072	0.062	0.029 U	
Acenaphthylene		0.029 U	0.029 U	0.17	0.074	0.029 U	
Anthracene		0.029 U	0.029 U	0.032 U	0.029	0.029 U	
Benzo(a)anthracene		0.029 U	0.029 U	0.045	0.09	0.029 U	
Benzo(b)fluoranthene		0.029 U	0.029 U	0.12	0.13	0.029 U	
Benzo(k)fluoranthene		0.029 U	0.029 U	0.098	0.11	0.029 U	
Benzo(g,h,i)perylene		0.029 U	0.029 U	0.062	0.087	0.029 U	
Benzo(a)pyrene		0.029 U	0.029 U	0.056	0.13	0.029 U	
Chrysene		0.029 U	0.029 U	0.3	0.16	0.029 U	
Dibenzo(a,h)anthracene		0.029 U	0.029 U	0.032 U	0.038	0.029 U	
Fluoranthene		0.029 U	0.029 U	0.15	0.17	0.029 U	
Fluorene		0.029 U	0.029 U	0.032 U	0.16	0.029 U	
Indeno(1,2,3-cd)pyrene		0.029 U	0.029 U	0.043	0.076	0.029 U	
Naphthalene	170	0.029 U	0.029 U	0.062	0.22	0.029 U	
Phenanthrene		0.029 U	0.029 U	0.19	0.38	0.029 U	
Pyrene		0.029 U	0.029 U	0.14	0.088	0.029 U	
		PCBs (
Aroclor 1016		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U	
Aroclor 1221		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U	
Aroclor 1232		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U	
Aroclor 1242		0.093 U	0.094 U	0.1 U	0.28	0.097 U	
Aroclor 1248		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U	
Aroclor 1254		0.19 U	0.19 U	0.21 U	0.26	0.19 U	
Aroclor 1260		0.19 U	0.19 U	0.21 U	0.2 U	0.19 U	
Total PCBs		0.845 U	0.850 U	0.920 U	1.136	0.865 U	
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)			
Antimony		1.1 UJ	1 UJ	1.3 UJ	NA	1 UJ	
Arsenic	750	10 J	8.3 J	9.5	NA	9 J	
Barium	690,000	88 J	87 J	170 J	NA	91 J	
Beryllium	1,300	1.1	1.1	1.2	NA	1.1	
Cadmium	1,800	0.56 U	0.52 U	0.85	NA	0.5 U	
Chromium	270	16 J	19 J	16 J	NA	21 J	
Copper		33 J	28 J	73 J	NA	30 J	
Lead		19	17	69 J	NA	19	
Mercury	10	0.029 U	0.028 U	0.18	NA	0.03 U	
Nickel	13,000	36 J	28 J	20 J	NA	33 J	
Selenium		1.1 U	1 U	1.3 U	NA	1 U	
Silver		1.1 U	1 U	1.3 U	NA	1 U	
Thallium		2.2	1.9	1.9	NA	1.9	
Zinc		52 J	45 J	100 J	NA	46 J	
Total Cyanide		0.32 U	0.27 U	0.35 U	NA	0.27 U	

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

⁽⁵⁾ NA - Not analyzed.

⁽⁶⁾ PCBs - Polychlorinated Biphenyls.

⁽⁷⁾ J - Indicates an estimated value.

 $^{(8)\} Soil\ samples\ (SP10-001,SP18B-002,SB21-002,SB22-001,SB23-003,SB24-002,SB26-001,SP40-001,SB45-002,SB50-001,SB57-001,and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration					
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001	
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12	
The second secon	8 8/	TCL Vola	tiles (mg/kg)			-	
Acetone	100,000	0.079 U	0.082	0.069 U	0.065	0.036 U	
Benzene	0.8	0.016 U	0.0089 U	0.014 U	0.12	0.0073 U	
Bromodichloromethane	3,000	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
Bromoform	53	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
Bromomethane	10	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U	
2-Butanone		0.031 U	0.018 U	0.028 U	0.034	0.015 U	
Carbon Disulfide	720	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
Carbon Tetrachloride	0.3	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
Chlorobenzene	130	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
Chloroethane +	1,500	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U	
Chloroform	0.3	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
Chloromethane +	110	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
Dibromochloromethane	1,300	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
1,1-Dichloroethane	1,300	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
1,2-Dichloroethane	0.4	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
1,1-Dichloroethene	1,500	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
cis-1,2-Dichloroethene	1,200	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
trans-1,2-Dichloroethene	3,100	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
1,2-Dichloropropane	15	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
cis-1,3-Dichloropropene	1.1	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
trans-1,3-Dichloropropene	1.1	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
Ethylbenzene	400	0.016 U	0.0089 U	0.014 U	0.37	0.0073 U	
2-Hexanone +	70	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U	
4-Methyl-2-Pentanone		0.031 U	0.018 U	0.028 U	0.019 U	0.015 U	
Methylene Chloride	13	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U	
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	0.0073 U	
Styrene	1,500	0.016 U	0.0089 U	0.014 U	0.014	0.0073 U	
1,1,2,2-Tetrachloroethane +	2,000	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
Tetrachloroethene	11	0.023	0.0089 U	0.014 U	0.0094 U	0.0073 U	
Toluene	650	0.016 U	0.0089 U	0.014 U	0.025	0.0073 U	
1,1,1-Trichloroethane	1,200	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
1,1,2-Trichloroethane	1,800	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
Trichloroethene	5	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U	
Vinyl Chloride	0.28	0.031 U	0.018 U	0.028 U	0.019 U	0.0073 U	
m,p-Xylene*	320	0.016 U	0.0089 U	0.014 U	0.057	NA	
o-Xylene*	320	0.016 U	0.0089 U	0.014 U	0.17	NA	
Xylenes, Total	320	NA	NA	NA	NA	0.015 U	

- NOTES:
 (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001		
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12		
		TCL Semivo	latiles (mg/kg)					
Bis(2-chloroethoxy)methane		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Bis(2-chloroethyl)ether **	0.2	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Bis(2-ethylhexyl)phthalate	31,000	9.7	0.4 U	0.39 U	2.1	0.43 U		
4-Bromophenyl phenyl ether		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Butyl benzyl phthalate	930	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Carbazole		1.9 U	0.4 U	0.39 U	0.87	0.87		
4-Chloro-3-methylphenol		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
4-Chloroaniline		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2-Chloronaphthalene		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2-Chlorophenol	53,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
4-Chlorophenyl phenyl ether		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Dibenzofuran		1.9 U	0.4 U	0.39 U	0.35 U	1.8		
1,2-Dichlorobenzene	560	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
1,3-Dichlorobenzene +	570	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
1,4-Dichlorobenzene	11,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
3,3´-Dichlorobenzidine		3.9 U	0.79 U	0.77 U	0.69 U	0.86 U		
2,4-Dichlorophenol		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Diethyl phthalate	2,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Dimethyl phthalate +	1,300	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Di-n-butyl phthalate	2,300	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2,4-Dimethylphenol		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
4,6-Dinitro-2-methylphenol		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
2,4-Dinitrophenol		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
2,4-Dinitrotoluene		1.9 U	0.4 U	0.39 U	0.35 U	0.22 U		
2,6-Dinitrotoluene		1.9 U	0.4 U	0.39 U	0.35 U	0.22 U		
Di-n-octyl phthalate	10,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Hexachlorobenzene **	1	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Hexachlorobutadiene +	1,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Hexachlorocyclopentadiene	10	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Hexachloroethane		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Isophorone	4,600	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2-Methylnaphthalene		1.9 U	0.4 U	0.39 U	1.7	2.8		
2-Methylphenol		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
4-Methylphenol		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2-Nitroaniline +	73	9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
3-Nitroaniline		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
4-Nitroaniline		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
Nitrobenzene	92	1.9 U	0.4 U	0.39 U	0.35 U	0.22 U		
2-Nitrophenol		9.4 U	1.9 U	1.9 U	1.7 U	0.43 U		
4-Nitrophenol		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
N-Nitrosodi-n-propylamine		1.9 U	0.4 U	0.39 U	0.35 U	0.22 U		
N-Nitrosodiphenylamine		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2, 2'-Oxybis(1-Chloropropane)		0.082 U	0.017 U	0.016 U	0.015 U	0.43 U		
Pentachlorophenol		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
Phenol		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
1,2,4-Trichlorobenzene	3,200	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2,4,5-Trichlorophenol		3.9 U	0.79 U	0.77 U	0.69 U	0.86 U		
2,4,6-Trichlorophenol	200	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
NOTES:	-							

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12
	<u> </u>	PAHs	(mg/kg)			
Acenaphthene		0.15 U	0.03 U	0.029 U	0.74	4.9
Acenaphthylene		0.15 U	0.03 U	0.029 U	0.65	0.73
Anthracene		0.16	0.03 U	0.029 U	1.9	6.4
Benzo(a)anthracene		0.15 U	0.03 U	0.029 U	2.5	5.8
Benzo(b)fluoranthene		0.78	0.03 U	0.029 U	2	4.5
Benzo(k)fluoranthene		0.81	0.03 U	0.029 U	1.9	4.1
Benzo(g,h,i)perylene		1.1	0.03 U	0.029 U	1.3	2.7
Benzo(a)pyrene		0.45	0.03 U	0.029 U	2.4	5.9
Chrysene		0.83	0.03 U	0.029 U	3.9	5.4
Dibenzo(a,h)anthracene		0.25	0.03 U	0.029 U	0.37	0.83
Fluoranthene		0.45	0.03 U	0.029 U	4.1	13
Fluorene		0.15 U	0.03 U	0.029 U	1.2	3.8
Indeno(1,2,3-cd)pyrene		0.69	0.03 U	0.029 U	0.94	2.4
Naphthalene	170	0.15 U	0.03 U	0.029 U	1.8	6.5
Phenanthrene		0.42	0.03 U	0.029 U	3.6	17
Pyrene		0.64	0.03 U	0.029 U	6.8	14
		PCBs (mg/kg)				
Aroclor 1016		0.094 U	0.096 U	0.093 U	0.084 U	NA
Aroclor 1221		0.094 U	0.096 U	0.093 U	0.084 U	NA
Aroclor 1232		0.094 U	0.096 U	0.093 U	0.084 U	NA
Aroclor 1242		1.5	0.096 U	0.093 U	5.2 U	NA
Aroclor 1248		0.094 U	0.096 U	0.093 U	0.084 U	NA
Aroclor 1254		1	0.19 U	0.19 U	5.2 U	NA
Aroclor 1260		0.19 U	0.19 U	0.19 U	0.17 U	NA
Total PCBs		3.066	0.860 U	0.845 U	10.906 U	NA
		t Metals and Total				
Antimony		0.98 J	1.1 UJ	1.2 UJ	0.95 UJ	NA
Arsenic	750	3.8	13 J	9.3 J	7.6	NA
Barium	690,000	140 J	79 J 1.2	94 J 1.2	59 J	NA
Beryllium	1,300	1.1			0.63	NA
Cadmium	1,800	1.5	0.57 U	0.58 U	1.1	NA
Chromium	270	21 J	20 J	20 J	13 J	NA
Copper		79 J	31 J	33 J	42 J	NA NA
Lead	 10	210 J	19 0.03 U	20	240 J 0.3	NA NA
Mercury		0.38	0.03 U 39 J	0.026 U	0.3 17 J	
Nickel	13,000	16 J		35 J		NA NA
Selenium Silver		0.94 U 0.94 U	1.1 U 1.1 U	1.2 U 1.2 U	0.95 U	NA NA
Silver Thallium					0.95 U	NA NA
		1.3	1.8	2.3	0.95 U	NA NA
Zinc		290 J	52 J	45 J	140 J	NA NA
Total Cyanide NOTES:		0.28 U	0.32 U	0.31 U	1.3	NA

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽⁵⁾ NA - Not analyzed.

⁽⁶⁾ PCBs - Polychlorinated Biphenyls.

⁽⁷⁾ J - Indicates an estimated value.

 $^{(8)\} Soil\ samples\ (SP10-001,SP18B-002,SB21-002,SB22-001,SB23-003,SB24-002,SB26-001,SP40-001,SB45-002,SB50-001,SB57-001, andSB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			th (feet below grou		
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.031 U	0.035 U	0.032 U	0.036 U	0.03 U
Benzene	0.8	0.0062 U	0.05	0.0065 U	0.0072 U	0.0059 U
Bromodichloromethane	3,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Bromoform	53	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Bromomethane	10	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
2-Butanone		0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Carbon Disulfide	720	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Carbon Tetrachloride	0.3	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Chlorobenzene	130	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Chloroethane +	1,500	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Chloroform	0.3	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Chloromethane +	110	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Dibromochloromethane	1,300	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1-Dichloroethane	1,300	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,2-Dichloroethane	0.4	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1-Dichloroethene	1,500	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
cis-1,2-Dichloroethene	1,200	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
trans-1,2-Dichloroethene	3,100	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,2-Dichloropropane	15	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
cis-1,3-Dichloropropene	1.1	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
trans-1,3-Dichloropropene	1.1	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Ethylbenzene	400	0.0062 U	0.33	0.0065 U	0.0072 U	0.0059 U
2-Hexanone +	70	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
4-Methyl-2-Pentanone		0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Methylene Chloride	13	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Methyl tert-butyl ether	8,800	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Styrene	1,500	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1,2,2-Tetrachloroethane +	2,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Tetrachloroethene	11	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Toluene	650	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1,1-Trichloroethane	1,200	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1,2-Trichloroethane	1,800	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Trichloroethene	5	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Vinyl Chloride	0.28	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
m,p-Xylene*	320	NA	NA	NA	NA	NA
o-Xylene*	320	NA	NA	NA	NA	NA
Xylenes, Total	320	0.012 U	0.26	0.013 U	0.014 U	0.012 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- $(5) + Screening\ level\ obtained\ from\ Table\ A: Soil\ Remediation\ Objectives\ for\ Residential\ Properties,\ Non-TACO\ Chemicals\ (Illinois\ EPA\ 2004).$
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1			h (feet below grou		
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20
		TCL Semivo	latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Bis(2-chloroethyl)ether **	0.2	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Bis(2-ethylhexyl)phthalate	31,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Bromophenyl phenyl ether		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Butyl benzyl phthalate	930	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Carbazole		0.42 U	1.1	0.41 U	0.57	0.41 U
4-Chloro-3-methylphenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Chloroaniline		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2-Chloronaphthalene		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2-Chlorophenol	53,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Chlorophenyl phenyl ether		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Dibenzofuran		0.42 U	2.5	0.41 U	1.5	0.41 U
1,2-Dichlorobenzene	560	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
1,3-Dichlorobenzene +	570	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
1,4-Dichlorobenzene	11,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
3,3´-Dichlorobenzidine		0.83 U	0.88 U	0.82 U	0.89 U	0.82 U
2,4-Dichlorophenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Diethyl phthalate	2,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Dimethyl phthalate +	1,300	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Di-n-butyl phthalate	2,300	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2,4-Dimethylphenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4,6-Dinitro-2-methylphenol		2 U	2.1 U	2 U	2.2 U	2 U
2,4-Dinitrophenol		2 U	2.1 U	2 U	2.2 U	2 U
2,4-Dinitrotoluene		0.21 U	0.23 U	0.21 U	0.23 U	0.21 U
2,6-Dinitrotoluene		0.21 U	0.23 U	0.21 U	0.23 U	0.21 U
Di-n-octyl phthalate	10,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Hexachlorobenzene	1	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Hexachlorobutadiene +	1,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Hexachlorocyclopentadiene	10	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Hexachloroethane		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Isophorone	4,600	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2-Methylnaphthalene		0.42 U	27	0.41 U	2.5	1.1
2-Methylphenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Methylphenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2-Nitroaniline +	73	2 U	2.1 U	2 U	2.2 U	2 U
3-Nitroaniline		2 U	2.1 U	2 U	2.2 U	2 U
4-Nitroaniline		2 U	2.1 U	2 U	2.2 U	2 U
Nitrobenzene	92	0.21 U	0.23 U	0.21 U	0.23 U	0.21 U
2-Nitrophenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
4-Nitrophenol		2 U	2.1 U	2 U	2.2 U	2 U
N-Nitrosodi-n-propylamine		0.21 U	0.23 U	0.21 U	0.23 U	0.21 U
N-Nitrosodiphenylamine		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2, 2'-Oxybis(1-Chloropropane)		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
Pentachlorophenol		2 U	2.1 U	2 U	2.2 U	2 U
Phenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
1,2,4-Trichlorobenzene	3,200	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U
2,4,5-Trichlorophenol		0.83 U	0.88 U	0.82 U	0.89 U	0.82 U
2,4,6-Trichlorophenol	200	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dep	th (feet below grou	ind surface)/Conce	entration
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20
		PAHs ((mg/kg)			
Acenaphthene		0.17	22	0.074	5.9	0.41
Acenaphthylene		0.033	2.7	0.031 U	0.99	0.031 U
Anthracene		0.19	11	0.031 U	9.5	0.16
Benzo(a)anthracene		0.17	9	0.032	8.6	0.11
Benzo(b)fluoranthene		0.075	4.5	0.031 U	5.5	0.063
Benzo(k)fluoranthene		0.12	5.1	0.031 U	6.2	0.082
Benzo(g,h,i)perylene		0.046	3.9	0.031 U	5.5	0.034
Benzo(a)pyrene		0.086	4.6	0.031 U	9.8	0.088
Chrysene		0.2	8	0.048	8.1	0.14
Dibenzo(a,h)anthracene		0.031 U	0.91	0.031 U	1.2	0.031 U
Fluoranthene		0.42	20	0.072	20	0.22
Fluorene		0.13	13	0.04	3.5	0.26
Indeno(1,2,3-cd)pyrene		0.035	2.5	0.031 U	4.2	0.031 U
Naphthalene	170	0.4	33	0.13	5.3	7.8
Phenanthrene		0.6	43	0.12	21	0.52
Pyrene		0.52	26	0.088	22	0.21
			(mg/kg)	, ,		r
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA
	11 1	Pollutant Metals a		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		I
Antimony		NA	NA	NA	NA	NA
Arsenic	750	NA	NA	NA	NA	NA
Barium	690,000	NA	NA	NA	NA	NA
Beryllium	1,300	NA	NA	NA	NA	NA
Cadmium	1,800	NA	NA	NA	NA	NA
Chromium	270	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA
Mercury	10	NA NA	NA	NA NA	NA	NA NA
Nickel	13,000	NA NA	NA	NA	NA	NA
Selenium		NA NA	NA	NA	NA	NA
Silver		NA NA	NA	NA	NA	NA NA
Thallium		NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA NA
Total Cyanide		NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽⁵⁾ PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ NA - Not analyzed.

⁽⁷⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration									
	Tier 1								
	Screening	SB49-001	SB49B-001	SB50-002	SB50-003	SB51-001			
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	14 - 16	20 - 22	10 -12			
	n		tiles (mg/kg)	1					
Acetone	100,000	0.029 U	0.031 U	1.9 U	0.037 UJ	0.03 U			
Benzene	0.8	0.0059 U	0.0063 U	2.9	0.0073 UJ	3.7			
Bromodichloromethane	3,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
Bromoform	53	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
Bromomethane	10	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U			
2-Butanone		0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U			
Carbon Disulfide	720	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
Carbon Tetrachloride **	0.3	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
Chlorobenzene	130	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
Chloroethane +	1,500	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U			
Chloroform **	0.3	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
Chloromethane +	110	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
Dibromochloromethane	1,300	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
1,1-Dichloroethane	1,300	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
1,2-Dichloroethane	0.4	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
1,1-Dichloroethene	1,500	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
cis-1,2-Dichloroethene	1,200	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
trans-1,2-Dichloroethene	3,100	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
1,2-Dichloropropane	15	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
cis-1,3-Dichloropropene	1.1	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
trans-1,3-Dichloropropene	1.1	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
Ethylbenzene	400	0.0059 U	0.0063 U	30	0.56	5.8			
2-Hexanone +	70	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U			
4-Methyl-2-Pentanone		0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U			
Methylene Chloride	13	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U			
Methyl tert-butyl ether	8,800	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
Styrene	1,500	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
1,1,2,2-Tetrachloroethane +	2,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
Tetrachloroethene	11	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
Toluene	650	0.0059 U	0.0063 U	0.38 U	0.018 J	0.0094			
1,1,1-Trichloroethane	1,200	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
1,1,2-Trichloroethane	1,800	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
Trichloroethene	5	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
Vinyl Chloride **	0.28	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U			
m,p-Xylene*	320	NA	NA	NA	NA	NA			
o-Xylene*	320	NA	NA	NA	NA	NA			
Xylenes, Total	320	0.012 U	0.013 U	21	2.1 J	3.9			

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) Shaded value exceeds Tier 1 screening level.
- (5) J Indicates an estimated value.
- (6) -- Toxicity criteria not available for exposure route.
- (7) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (8) NA Not analyzed.
- (9) * The "total xylenes" screening level was used because it is more conservative.
- (10) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (11) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SP45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			th (feet below grou		
	Screening	SB49-001	SB49B-001	SB50-002	SB50-003	SB51-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	14 - 16	20 - 22	10 -12
		TCL Semivo	olatiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Bis(2-chloroethyl)ether **	0.2	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Bis(2-ethylhexyl)phthalate	31,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4-Bromophenyl phenyl ether		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Butyl benzyl phthalate	930	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Carbazole		0.42 U	0.41 U	0.46 U	0.45 U	4.8
4-Chloro-3-methylphenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4-Chloroaniline		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2-Chloronaphthalene		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2-Chlorophenol	53,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4-Chlorophenyl phenyl ether		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Dibenzofuran		0.42 U	0.41 U	1.2	0.45 U	3.4
1,2-Dichlorobenzene	560	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
1,3-Dichlorobenzene +	570	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
1,4-Dichlorobenzene	11,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
3,3´-Dichlorobenzidine		0.84 U	0.82 U	0.91 U	0.89 U	0.87 U
2,4-Dichlorophenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Diethyl phthalate	2,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Dimethyl phthalate +	1,300	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Di-n-butyl phthalate	2,300	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2,4-Dimethylphenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4,6-Dinitro-2-methylphenol		2 U	2 U	2.2 U	2.2 U	2.1 U
2,4-Dinitrophenol		2 U	2 U	2.2 U	2.2 U	2.1 U
2,4-Dinitrotoluene		0.22 U	0.21 U	0.23 U	0.23 U	0.22 U
2,6-Dinitrotoluene		0.22 U	0.21 U	0.23 U	0.23 U	0.22 U
Di-n-octyl phthalate	10,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Hexachlorobenzene	1	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Hexachlorobutadiene +	1,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Hexachlorocyclopentadiene	10	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Hexachloroethane		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Isophorone	4,600	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2-Methylnaphthalene		0.42 U	0.41 U	7.5	0.45 U	52
2-Methylphenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4-Methylphenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2-Nitroaniline +	73	2 U	2 U	2.2 U	2.2 U	2.1 U
3-Nitroaniline		2 U	2 U	2.2 U	2.2 U	2.1 U
4-Nitroaniline		2 U	2 U	2.2 U	2.2 U	2.1 U
Nitrobenzene	92	0.22 U	0.21 U	0.23 U	0.23 U	0.22 U
2-Nitrophenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
4-Nitrophenol		2 U	2 U	2.2 U	2.2 U	2.1 U
N-Nitrosodi-n-propylamine		0.22 U	0.21 U	0.23 U	0.23 U	0.22 U
N-Nitrosodiphenylamine		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2, 2'-Oxybis(1-Chloropropane)		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
Pentachlorophenol		2 U	2 U	2.2 U	2.2 U	2.1 U
Phenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
1,2,4-Trichlorobenzene	3,200	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U
2,4,5-Trichlorophenol		0.84 U	0.82 U	0.91 U	0.89 U	0.87 U
2,4,6-Trichlorophenol	200	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	TP' 4	,	T	d. (C (1 1	1	
1	Tier 1				ind surface)/Conce	
G	Screening	SB49-001	SB49B-001	SB50-002 14 - 16	SB50-003 20 - 22	SB51-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	14 - 10	20 - 22	10 -12
l 	П		(mg/kg)			
Acenaphthene		0.32	0.031 U	3	0.086	28
Acenaphthylene		0.19	0.031 U	0.44	0.034 U	4.1
Anthracene		0.44	0.031 U	2.6	0.18	20
Benzo(a)anthracene		1	0.035	3.9	0.42	17
Benzo(b)fluoranthene		0.78	0.031 U	2.4	0.27	8.2
Benzo(k)fluoranthene		0.74	0.032	3.8	0.38	7.4
Benzo(g,h,i)perylene		0.68	0.031 U	0.74	0.077	8
Benzo(a)pyrene		1	0.041	4.4	0.46	16
Chrysene		1	0.053	3.1	0.42	17
Dibenzo(a,h)anthracene		0.11	0.031 U	0.24	0.037	1.4
Fluoranthene		1.9	0.058	7.2	0.66	36
Fluorene		0.24	0.031 U	2.2	0.098	21
Indeno(1,2,3-cd)pyrene		0.55	0.031 U	0.89	0.098	6.2
Naphthalene	170	0.2	0.041	44	0.52	67
Phenanthrene		1.3	0.079	8.7	0.46	78
Pyrene		2.1	0.078	6.4	0.55	50
 	п		(mg/kg)			
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA
ł 			and Total Cyanide			
Antimony		NA	NA	NA	NA	NA
Arsenic	750	NA	NA	NA	NA	NA
Barium	690,000	NA	NA	NA	NA	NA
Beryllium	1,300	NA	NA	NA	NA	NA
Cadmium	1,800	NA	NA	NA	NA	NA
Chromium	270	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA
Mercury	10	NA	NA	NA	NA	NA
Nickel	13,000	NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA
Thallium		NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA
Total Cyanide NOTES:		NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

⁽⁵⁾ PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ NA - Not analyzed.

⁽⁷⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Sample Location	and Depth (feet be	elow ground surfa	ice)/Concentration	
	Screening	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	Level (mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
			CL Volatiles (mg/l		<u> </u>		
Acetone	100,000	0.027 U	1.4 U	0.027 UJ	0.036 U	0.1	0.031 UJ
Benzene	0.8	0.0055 U	2.6	0.0089 J	0.0086	0.21	0.0062 UJ
Bromodichloromethane	3,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Bromoform	53	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Bromomethane	10	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
2-Butanone		0.011 U	0.55 U	0.011 UJ	0.015 U	0.023	0.012 UJ
Carbon Disulfide	720	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Carbon Tetrachloride	0.3	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chlorobenzene	130	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chloroethane +	1,500	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
Chloroform	0.3	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chloromethane +	110	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Dibromochloromethane	1,300	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1-Dichloroethane	1,300	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,2-Dichloroethane	0.4	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1-Dichloroethene	1,500	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
cis-1,2-Dichloroethene	1,200	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
trans-1,2-Dichloroethene	3,100	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,2-Dichloropropane	15	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
cis-1,3-Dichloropropene	1.1	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
trans-1,3-Dichloropropene	1.1	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Ethylbenzene	400	0.0055 U	11	0.043 J	0.0073 U	1.2	0.0062 UJ
2-Hexanone +	70	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
4-Methyl-2-Pentanone		0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
Methylene Chloride	13	0.011 U	0.55 U	0.011 UJ	0.018	0.035	0.026 J
Methyl tert-butyl ether	8,800	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Styrene	1,500	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1,2,2-Tetrachloroethane +	2,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Tetrachloroethene	11	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Toluene	650	0.0055 U	0.7	0.0097 J	0.0073 U	0.013	0.0062 UJ
1,1,1-Trichloroethane	1,200	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1,2-Trichloroethane	1,800	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Trichloroethene	5	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Vinyl Chloride	0.28	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
m,p-Xylene*	320	NA	NA	NA	NA	NA	NA
o-Xylene*	320	NA	NA	NA	NA	NA	NA
Xylenes, Total	320	0.024	9.8	0.055 J	0.015 U	1.7	0.012 UJ

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) Shaded value exceeds Tier 1 screening level.
- (5) J Indicates an estimated value.
- (6) -- Toxicity criteria not available for exposure route.
- (7) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (8) NA Not analyzed.
- (9) * The "total xylenes" screening level was used because it is more conservative.
- (10) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1					ce)/Concentration	
	Screening	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	Level (mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
		TCL	Semivolatiles (m	g/kg)			
Bis(2-chloroethoxy)methane		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Bis(2-chloroethyl)ether **	0.2	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Bis(2-ethylhexyl)phthalate	31,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Bromophenyl phenyl ether		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Butyl benzyl phthalate	930	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Carbazole		0.41 U	0.4 U	0.39 U	0.41 U	5.1	0.4 U
4-Chloro-3-methylphenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Chloroaniline		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Chloronaphthalene		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Chlorophenol	53,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Chlorophenyl phenyl ether		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Dibenzofuran		0.82	0.91	0.39 U	0.41 U	4.9	0.4 U
1,2-Dichlorobenzene	560	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,3-Dichlorobenzene +	570	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,4-Dichlorobenzene	11,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
3,3´-Dichlorobenzidine		0.82 U	0.8 U	0.77 U	0.82 U	0.85 U	0.8 U
2,4-Dichlorophenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Diethyl phthalate	2,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Dimethyl phthalate +	1,300	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Di-n-butyl phthalate	2,300	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2,4-Dimethylphenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
2,4-Dinitrophenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
2,4-Dinitrotoluene		0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
2,6-Dinitrotoluene		0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
Di-n-octyl phthalate	10,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorobenzene	1	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorobutadiene +	1,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorocyclopentadiene	10	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachloroethane		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Isophorone	4,600	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Methylnaphthalene		4.5	19	1.8	0.41 U	37	0.4 U
2-Methylphenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Methylphenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Nitroaniline +	73	2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
3-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
4-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
Nitrobenzene	92	0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
2-Nitrophenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Nitrophenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
N-Nitrosodi-n-propylamine		0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
N-Nitrosodiphenylamine		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2, 2'-Oxybis(1-Chloropropane)		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Pentachlorophenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
Phenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,2,4-Trichlorobenzene	3,200	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2,4,5-Trichlorophenol		0.82 U	0.8 U	0.77 U	0.82 U	0.85 U	0.8 U
2,4,6-Trichlorophenol	200	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Sample Location	and Depth (feet be	elow ground surfa	ce)/Concentration	
	Screening	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	Level (mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
			PAHs (mg/kg)				
Acenaphthene		2.4	3.7	0.19	2	16	0.11
Acenaphthylene		0.47	1	0.066	1.6	2.4	0.046
Anthracene		2.2	2.2	0.12	2.6	16	0.12
Benzo(a)anthracene		2.3	1.8	0.091	5.2	14	0.12
Benzo(b)fluoranthene		1.2	0.71	0.038	1.4	6.4	0.054
Benzo(k)fluoranthene		1.1	0.31	0.035	1.8	6.5	0.076
Benzo(g,h,i)perylene		0.57	0.18	0.029 U	1	1.6	0.042
Benzo(a)pyrene		1.7	1.3	0.07	4.8	11	0.099
Chrysene		2	1.7	0.096	6.8	15	0.14
Dibenzo(a,h)anthracene		0.11	0.1	0.029 U	0.5	1.2	0.03 U
Fluoranthene		3.7	2.7	0.15	7.8	24	0.22
Fluorene		2.5	3.6	0.2	4	19	0.13
Indeno(1,2,3-cd)pyrene		0.59	0.35	0.029 U	0.92	1.8	0.031
Naphthalene	170	6.1	22	2.3	1.5	41	0.24
Phenanthrene		7.6	11	0.65	14	57	0.48
Pyrene		4.2	4.5	0.22	12	27	0.27
			PCBs (mg/kg)				
Aroclor 1016		NA	NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA	NA
			t Metals and Total				
Antimony		NA	NA	NA	NA	NA	NA
Arsenic	750	NA	NA	NA	NA	NA	NA
Barium	690,000	NA	NA	NA	NA	NA	NA
Beryllium	1,300	NA	NA	NA	NA	NA	NA
Cadmium	1,800	NA	NA	NA	NA	NA	NA
Chromium	270	NA	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA	NA
Mercury	10	NA	NA	NA	NA	NA	NA
Nickel	13,000	NA	NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA	NA
Thallium		NA	NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA	NA
Total Cyanide NOTES:		NA	NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽⁵⁾ PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ NA - Not analyzed.

⁽⁷⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below gro	und surface)/Conc	entration
	Screening	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20
		TCL Volat	iles (mg/kg)			
Acetone	100,000	3.2 U	0.027 U	0.026	0.032 U	0.028 U
Benzene	0.8	5.7	0.0054 U	0.064	0.0064 U	0.0056 U
Bromodichloromethane	3,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Bromoform	53	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Bromomethane	10	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
2-Butanone		1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Carbon Disulfide	720	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Carbon Tetrachloride **	0.3	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Chlorobenzene	130	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Chloroethane +	1,500	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Chloroform **	0.3	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Chloromethane +	110	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Dibromochloromethane	1,300	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,1-Dichloroethane	1,300	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,2-Dichloroethane **	0.4	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,1-Dichloroethene	1,500	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
cis-1,2-Dichloroethene	1,200	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
trans-1,2-Dichloroethene	3,100	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,2-Dichloropropane	15	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
cis-1,3-Dichloropropene	1.1	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
trans-1,3-Dichloropropene	1.1	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Ethylbenzene	400	25	0.0054 U	0.11	0.0064 U	0.0056 U
2-Hexanone +	70	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
4-Methyl-2-Pentanone		1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Methylene Chloride	13	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Methyl tert-butyl ether	8,800	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Styrene	1,500	0.64 U	0.0054 U	0.016	0.0064 U	0.0056 U
1,1,2,2-Tetrachloroethane +	2,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Tetrachloroethene	11	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Toluene	650	0.84	0.0054 U	0.066	0.0064 U	0.0056 U
1,1,1-Trichloroethane	1,200	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,1,2-Trichloroethane	1,800	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Trichloroethene	5	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Vinyl Chloride **	0.28	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
m,p-Xylene*	320	NA	NA	NA	NA	NA
o-Xylene*	320	NA	NA	NA	NA	NA
Xylenes, Total	320	8.7	0.011 U	0.18	0.013 U	0.011 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) Shaded value exceeds Tier 1 screening level.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
- (9) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (10) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1		Location and Dep	th (feet below grou	and surface)/Conce	entration
	Screening	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20
		TCL Semivo	latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Bis(2-chloroethyl)ether **	0.2	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Bis(2-ethylhexyl)phthalate	31,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
4-Bromophenyl phenyl ether		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Butyl benzyl phthalate	930	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Carbazole		0.51	0.4 U	0.39 U	0.4 U	0.4 U
4-Chloro-3-methylphenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
4-Chloroaniline		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
2-Chloronaphthalene		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
2-Chlorophenol	53,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
4-Chlorophenyl phenyl ether		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Dibenzofuran		1.9	0.4 U	0.39 U	0.4 U	0.4 U
1,2-Dichlorobenzene	560	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
1,3-Dichlorobenzene +	570	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
1,4-Dichlorobenzene	11,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
3,3´-Dichlorobenzidine		0.84 U	0.79 U	0.79 U	0.81 U	0.81 U
2,4-Dichlorophenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Diethyl phthalate	2,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Dimethyl phthalate +	1,300	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Di-n-butyl phthalate	2,300	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
2,4-Dimethylphenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.9 U	2 U	2 U
2,4-Dinitrophenol		2 U	1.9 U	1.9 U	2 U	2 U
2,4-Dinitrotoluene		0.22 U	0.2 U	0.2 U	0.21 U	0.21 U
2,6-Dinitrotoluene		0.22 U	0.2 U	0.2 U	0.21 U	0.21 U
Di-n-octyl phthalate	10,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Hexachlorobenzene	1	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Hexachlorobutadiene +	1,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Hexachlorocyclopentadiene	10	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Hexachloroethane		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Isophorone	4,600	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
2-Methylnaphthalene		45	0.4 U	0.8	0.4 U	0.4 U
2-Methylphenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
4-Methylphenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
2-Nitroaniline +	73	2 U	1.9 U	1.9 U	2 U	2 U
3-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2 U
4-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2 U
Nitrobenzene	92	0.22 U	0.2 U	0.2 U	0.21 U	0.21 U
2-Nitrophenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
4-Nitrophenol		2 U	1.9 U	1.9 U	2 U	2 U
N-Nitrosodi-n-propylamine		0.22 U	0.2 U	0.2 U	0.21 U	0.21 U
N-Nitrosodiphenylamine		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
2, 2'-Oxybis(1-Chloropropane)		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
Pentachlorophenol		2 U	1.9 U	1.9 U	2 U	2 U
Phenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
1,2,4-Trichlorobenzene	3,200	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U
2,4,5-Trichlorophenol		0.84 U	0.79 U	0.79 U	0.81 U	0.81 U
2,4,6-Trichlorophenol NOTES:	200	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (4) U Illuscates Compound analyte was analyzed for our for detected, the associated value is us sample reporting infinit.

 (5) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.

 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).

 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below gro	und surface)/Conc	entration
	Screening	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20
		PAHs	(mg/kg)			
Acenaphthene		12	0.046	0.078	0.03 U	0.031 U
Acenaphthylene		4	0.03 U	0.089	0.03 U	0.031 U
Anthracene		7.4	0.046	0.099	0.03 U	0.031 U
Benzo(a)anthracene		5.4	0.037	0.098	0.03 U	0.031 U
Benzo(b)fluoranthene		2.6	0.03 U	0.054	0.03 U	0.031 U
Benzo(k)fluoranthene		2.1	0.03 U	0.05	0.03 U	0.031 U
Benzo(g,h,i)perylene		1.8	0.03 U	0.033	0.03 U	0.031 U
Benzo(a)pyrene		4.8	0.034	0.092	0.03 U	0.031 U
Chrysene		5.3	0.045	0.1	0.03 U	0.031 U
Dibenzo(a,h)anthracene		0.6	0.03 U	0.029 U	0.03 U	0.031 U
Fluoranthene		9.6	0.062	0.16	0.03 U	0.031 U
Fluorene		9.3	0.049	0.15	0.03 U	0.031 U
Indeno(1,2,3-cd)pyrene		1.6	0.03 U	0.029 U	0.03 U	0.031 U
Naphthalene	170	110	0.26	0.95	0.03 U	0.031 U
Phenanthrene		27	0.15	0.58	0.067	0.037
Pyrene		14	0.095	0.31	0.03 U	0.031 U
		PCBs	(mg/kg)			
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA
	Priority		and Total Cyanide	(mg/kg)		
Antimony		NA	NA	NA	NA	NA
Arsenic	750	NA	NA	NA	NA	NA
Barium	690,000	NA	NA	NA	NA	NA
Beryllium	1,300	NA	NA	NA	NA	NA
Cadmium	1,800	NA	NA	NA	NA	NA
Chromium	270	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA
Mercury	10	NA	NA	NA	NA	NA
Nickel	13,000	NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA
Thallium		NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA
Total Cyanide		NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽⁵⁾ PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ NA - Not analyzed.

 $^{(7)\} Soil\ samples\ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	ınd surface)/Conce	entration
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18
	<u> </u>	TCL Volat	tiles (mg/kg)			
Acetone	100.000	0.028 U	0.047 U	0.031 UJ	0.028 U	0.033 U
Benzene	0.8	0.0057 U	0.0094 U	0.0061 UJ	0.031	0.0067 U
Bromodichloromethane	3,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Bromoform	53	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Bromomethane	10	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
2-Butanone		0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
Carbon Disulfide	720	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Carbon Tetrachloride	0.3	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Chlorobenzene	130	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Chloroethane +	1,500	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
Chloroform	0.3	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Chloromethane +	110	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Dibromochloromethane	1,300	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1-Dichloroethane	1,300	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,2-Dichloroethane	0.4	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1-Dichloroethene	1,500	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
cis-1,2-Dichloroethene	1,200	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
trans-1,2-Dichloroethene	3,100	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,2-Dichloropropane	15	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
cis-1,3-Dichloropropene	1.1	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
trans-1,3-Dichloropropene	1.1	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Ethylbenzene	400	0.0057 U	0.0094 U	0.0061 UJ	0.071	0.0067 U
2-Hexanone +	70	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
4-Methyl-2-Pentanone		0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U
Methylene Chloride	13	0.011 U	0.019 U	0.012 UJ	0.017	0.016
Methyl tert-butyl ether	8,800	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Styrene	1,500	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1,2,2-Tetrachloroethane +	2,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Tetrachloroethene	11	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Toluene	650	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1,1-Trichloroethane	1,200	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
1,1,2-Trichloroethane	1,800	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Trichloroethene	5	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
Vinyl Chloride	0.28	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U
m,p-Xylene*	320	NA	NA	NA	NA	NA
o-Xylene*	320	NA	NA	NA	NA	NA
Xylenes, Total	320	0.011 U	0.019 U	0.012 UJ	0.044	0.013 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) Shaded value exceeds Tier 1 screening level.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) *The 'total xylenes' screening level was used because it is more conservative.
 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002		
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18		
		TCL Semivo	latiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
Bis(2-chloroethyl)ether **	0.2	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
4-Bromophenyl phenyl ether		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
Butyl benzyl phthalate	930	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
Carbazole		0.39 U	6.8	0.41 U	0.39 U	0.38 U		
4-Chloro-3-methylphenol		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
4-Chloroaniline		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
2-Chloronaphthalene		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
2-Chlorophenol	53,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
4-Chlorophenyl phenyl ether		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
Dibenzofuran		0.39 U	4.6	0.41 U	0.39 U	0.38 U		
1,2-Dichlorobenzene	560	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
1,3-Dichlorobenzene +	570	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
1,4-Dichlorobenzene	11,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
3,3´-Dichlorobenzidine		0.79 U	1.1 U	0.82 U	0.78 U	0.75 U		
2,4-Dichlorophenol		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
Diethyl phthalate	2,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
Dimethyl phthalate +	1,300	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
Di-n-butyl phthalate	2,300	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
2,4-Dimethylphenol		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
4,6-Dinitro-2-methylphenol		1.9 U	2.6 U	2 U	1.9 U	1.8 U		
2,4-Dinitrophenol		1.9 U	2.6 U	2 U	1.9 U	1.8 U		
2,4-Dinitrotoluene		0.2 U	0.28 U	0.21 U	0.2 U	0.19 U		
2,6-Dinitrotoluene		0.2 U	0.28 U	0.21 U	0.2 U	0.19 U		
Di-n-octyl phthalate	10,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
Hexachlorobenzene	1	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
Hexachlorobutadiene +	1,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
Hexachlorocyclopentadiene	10	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
Hexachloroethane		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
Isophorone	4,600	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
2-Methylnaphthalene		0.39 U	3.8	0.41 U	0.39 U	0.38 U		
2-Methylphenol		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
4-Methylphenol		0.39 U	2.2	0.41 U	0.39 U	0.38 U		
2-Nitroaniline +	73	1.9 U	2.6 U	2 U	1.9 U	1.8 U		
3-Nitroaniline		1.9 U	2.6 U	2 U	1.9 U	1.8 U		
4-Nitroaniline		1.9 U	2.6 U	2 U	1.9 U	1.8 U		
Nitrobenzene	92	0.2 U	0.28 U	0.21 U	0.2 U	0.19 U		
2-Nitrophenol		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
4-Nitrophenol		1.9 U	2.6 U	2 U	1.9 U	1.8 U		
N-Nitrosodi-n-propylamine		0.2 U	0.28 U	0.21 U	0.2 U	0.19 U		
N-Nitrosodiphenylamine		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
2, 2'-Oxybis(1-Chloropropane)		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
Pentachlorophenol		1.9 U	2.6 U	2 U	1.9 U	1.8 U		
Phenol		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
1,2,4-Trichlorobenzene	3,200	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		
2,4,5-Trichlorophenol		0.79 U	1.1 U	0.82 U	0.78 U	0.75 U		
2,4,6-Trichlorophenol	200	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U		

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Residential Property

	Tier 1	A	Location and Dep	th (feet below grou		
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18
		PAHs	(mg/kg)			
Acenaphthene		0.03 U	4.3	0.072	0.029 U	0.028 U
Acenaphthylene		0.03 U	0.45	0.031 U	0.029 U	0.028 U
Anthracene		0.03 U	11	0.079	0.029 U	0.028 U
Benzo(a)anthracene		0.03 U	14	0.065	0.029 U	0.028 U
Benzo(b)fluoranthene		0.03 U	8.5	0.038	0.029 U	0.028 U
Benzo(k)fluoranthene		0.03 U	9.8	0.038	0.029 U	0.028 U
Benzo(g,h,i)perylene		0.03 U	3.2	0.031 U	0.029 U	0.028 U
Benzo(a)pyrene		0.03 U	12	0.059	0.029 U	0.028 U
Chrysene		0.037	12	0.061	0.029	0.028 U
Dibenzo(a,h)anthracene		0.03 U	1.6	0.031 U	0.029 U	0.028 U
Fluoranthene		0.056	27	0.14	0.029	0.028 U
Fluorene		0.03 U	6.2	0.088	0.029 U	0.028 U
Indeno(1,2,3-cd)pyrene		0.03 U	3.8	0.031 U	0.029 U	0.028 U
Naphthalene	170	0.054	4	0.39	0.087	0.028 U
Phenanthrene		0.11	27	0.24	0.089	0.075
Pyrene		0.057	23	0.11	0.05	0.028 U
		PCBs ((mg/kg)			
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA
	Priority	Pollutant Metals	and Total Cyanide	e (mg/kg)		
Antimony		NA	NA	NA	NA	NA
Arsenic	750	NA	NA	NA	NA	NA
Barium	690,000	NA	NA	NA	NA	NA
Beryllium	1,300	NA	NA	NA	NA	NA
Cadmium	1,800	NA	NA	NA	NA	NA
Chromium	270	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA
Mercury	10	NA	NA	NA	NA	NA
Nickel	13,000	NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA
Thallium		NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA
Total Cyanide		NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram.

 ⁽²⁾ PAHs - Polynuclear Aromatic Hydrocarbons.
 (3) -- Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit. (5) PCBs - Polychlorinated Biphenyls.

⁽⁶⁾ NA - Not analyzed.

 $^{(7)\} Soil\ samples\ (SP10-001,SP18B-002,SB21-002,SB22-001,SB23-003,SB24-002,SB26-001,SP40-001,SB45-002,SB50-001,SB57-001,andSB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 Tier 1 Screening: Soil Inhalation Exposure Route Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample		th (feet below grou	ind surface)/Conce	
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.099	0.041 U	0.17	0.091	0.051
Benzene	2.2	0.0097 U	0.0082 U	0.055	0.015	0.0072 U
Bromodichloromethane	3,000	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Bromoform	140	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Bromomethane	3.9	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
2-Butanone		0.019 U	0.016 U	0.024 U	0.02	0.014 U
Carbon Disulfide	9	0.0097 U	0.0082 U	0.023	0.0081 U	0.0072 U
Carbon Tetrachloride	0.9	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chlorobenzene	1.3	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chloroethane +	94	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
Chloroform	0.76	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chloromethane +	1.1	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Dibromochloromethane	1,300	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1-Dichloroethane	130	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,2-Dichloroethane	0.99	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1-Dichloroethene	300	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
cis-1,2-Dichloroethene	1,200	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
trans-1,2-Dichloroethene	3,100	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,2-Dichloropropane	0.5	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
cis-1,3-Dichloropropene	0.39	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
trans-1,3-Dichloropropene	0.39	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Ethylbenzene	58	0.0097 U	0.0082 U	0.044	0.049	0.0072 U
2-Hexanone +	0.72	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
4-Methyl-2-Pentanone		U	0.016 U	0.024 U	0.016 U	0.014 U
Methylene Chloride	34	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1,2,2-Tetrachloroethane +	2,000	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Tetrachloroethene	28	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Toluene	42	0.0097 U	0.0082 U	0.036	0.0081 U	0.0072 U
1,1,1-Trichloroethane	1,200	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1,2-Trichloroethane	1,800	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Trichloroethene	12	0.0097 U	0.0082 U	0.021	0.0081 U	0.0072 U
Vinyl Chloride	1.1	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
m,p-Xylene*	320	0.0097 U	0.0082 U	0.028	0.0081 U	0.0072 U
o-Xylene*	320	0.0097 U	0.0082 U	0.025	0.012	0.0096
Xylenes, Total	320	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7)* The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued) Tier 1 Screening: Soil Inhalation Exposure Route Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration								
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001		
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3		
	<u> </u>	TCL Semivol	atiles (mg/kg)	<u>'</u>				
Bis(2-chloroethoxy)methane		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Bis(2-chloroethyl)ether	0.66	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Bis(2-ethylhexyl)phthalate	31,000	0.37 U	0.45	0.37 U	0.38 U	0.49		
4-Bromophenyl phenyl ether		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Butyl benzyl phthalate	930	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Carbazole		0.37 U	0.38 U	0.52	0.47	2.9		
4-Chloro-3-methylphenol		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
4-Chloroaniline		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2-Chloronaphthalene		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2-Chlorophenol	53,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
4-Chlorophenyl phenyl ether		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Dibenzofuran		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
1,2-Dichlorobenzene	310	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
1,3-Dichlorobenzene +	570	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
1,4-Dichlorobenzene	340	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
3,3'-Dichlorobenzidine		0.74 U	0.76 U	0.75 U	0.75 U	0.71 U		
2,4-Dichlorophenol		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Diethyl phthalate	2,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Dimethyl phthalate +	1,300	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Di-n-butyl phthalate	2,300	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2,4-Dimethylphenol		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
4,6-Dinitro-2-methylphenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
2,4-Dinitrophenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
2,4-Dinitrotoluene		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2,6-Dinitrotoluene		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Di-n-octyl phthalate	10,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Hexachlorobenzene	2.6	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Hexachlorobutadiene +	180	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Hexachlorocyclopentadiene	1.1	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Hexachloroethane		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
Isophorone	4,600	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2-Methylnaphthalene		0.37 U	0.38 U	0.85	0.38 U	0.57		
2-Methylphenol		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
4-Methylphenol		0.37 U	0.38 U	0.56	0.38 U	0.36 U		
2-Nitroaniline +	7.5	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
3-Nitroaniline		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
4-Nitroaniline		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
Nitrobenzene	9.4	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2-Nitrophenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
4-Nitrophenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
N-Nitrosodi-n-propylamine		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
N-Nitrosodiphenylamine		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.016 U	0.016 U	0.015 U		
Pentachlorophenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U		
Phenol		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
1,2,4-Trichlorobenzene	920	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		
2,4,5-Trichlorophenol	 540	0.74 U	0.76 U	0.75 U	0.75 U	0.71 U		
2,4,6-Trichlorophenol	540	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U		

⁽¹⁾ mg/kg - milligrams per kilogram.

 $[\]eqno(2) TCL - Target compound \ list.$

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued) Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample 1	Location and Dept	h (feet below grou	nd surface)/Conce	ntration
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3
		PAHs (mg/kg)			
Acenaphthene		0.037	0.029 U	0.45	0.19	0.69
Acenaphthylene		0.032	0.029 U	1.2	0.13	0.32
Anthracene		0.27	0.16	1.5	0.3	0.75
Benzo(a)anthracene		0.34	0.34	3.5	0.43	2.5
Benzo(b)fluoranthene		0.44	0.32	2.2	0.36	1.8
Benzo(k)fluoranthene		0.44	0.26	2.7	0.39	1.6
Benzo(g,h,i)perylene		0.31	0.23	2	0.48	0.94
Benzo(a)pyrene		0.32	0.21	3.1	0.52	2.3
Chrysene		0.71	0.67	4.1	0.62	2.5
Dibenzo(a,h)anthracene		0.16	0.099	0.81	0.13	0.39
Fluoranthene		1.4	1.1	6.2	0.85	4.1
Fluorene		0.067	0.029 U	0.63	0.21	0.65
Indeno(1,2,3-cd)pyrene		0.31	0.2	2	0.35	0.93
Naphthalene	1.8	0.36	0.044	0.84	0.28	0.75
Phenanthrene		0.64	0.35	3.8	1	3.7
Pyrene		1.5	1.2	8.6	1.1	4.5
		PCBs (mg/kg)			
Aroclor 1016		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1221		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1232		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1242		0.09 U	0.093 U	0.094	0.09 U	0.4
Aroclor 1248		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1254		0.18 U	0.19 U	0.18 U	0.18 U	0.33
Aroclor 1260		0.18 U	0.19 U	0.18 U	0.18 U	0.16 U
Total PCBs		0.810 U	0.845 U	0.814	0.810 U	1.226
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony		0.97 UJ	1 UJ	1 UJ	1 UJ	1.1 UJ
Arsenic	25,000	8.1	9.2 J	6.5	2.5 J	7.2
Barium	870,000	61 J	47 J	82 J	19 J	68 J
Beryllium	44,000	0.75	0.87	1.1	0.63	1
Cadmium	59,000	0.91	0.54	0.79	0.52 U	1.1
Chromium	690	14 J	20 J	15 J	6.9 J	20 J
Copper		66 J	32 J	43 J	8.9 J	110 J
Lead		380 J	41	130 J	31	150 J
Mercury	52,000	0.35	0.28	0.15	0.035	0.076
Nickel	440,000	17 J	33 J	20 J	5.5 J	23 J
Selenium		0.97 U	1 U	1 U	1 U	1.1 U
Silver		0.97 U	1 U	1 U	1 U	1.1 U
Thallium		0.97 U	4.2	1	1 U	1.1 U
Zinc		160 J	70 J	90 J	23 J	290 J
Total Cyanide		0.31 U	0.27 U	0.26 U	0.26 U	0.23 U

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- $(7)\ Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued) Tier 1 Screening: Soil Inhalation Exposure Route Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	A		th (feet below grou		ntration
	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001
Compound/Analyte	Level (mg/kg)	4-5	5-7	2-3	9-10	2-3
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.32	0.061 U	0.067	0.061	0.073
Benzene	2.2	0.017 U	0.012 U	0.015	0.012 U	0.079
Bromodichloromethane	3,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Bromoform	140	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Bromomethane	3.9	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
2-Butanone		0.072	0.025 U	0.024 U	0.023 U	0.025 U
Carbon Disulfide	9	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Carbon Tetrachloride	0.9	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chlorobenzene	1.3	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chloroethane +	94	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Chloroform	0.76	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chloromethane +	1.1	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Dibromochloromethane	1,300	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1-Dichloroethane	130	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,2-Dichloroethane	0.99	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1-Dichloroethene	300	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
cis-1,2-Dichloroethene	1,200	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
trans-1,2-Dichloroethene	3,100	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,2-Dichloropropane	0.5	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
cis-1,3-Dichloropropene	0.39	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
trans-1,3-Dichloropropene	0.39	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Ethylbenzene	58	0.017 U	0.012 U	0.012 U	0.012 U	0.15
2-Hexanone +	0.72	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
4-Methyl-2-Pentanone		0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Methylene Chloride	34	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1,2,2-Tetrachloroethane +	2,000	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Tetrachloroethene	28	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Toluene	42	0.017 U	0.012 U	0.012 U	0.012 U	0.041
1,1,1-Trichloroethane	1,200	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1,2-Trichloroethane	1,800	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Trichloroethene	12	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Vinyl Chloride	1.1	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
m,p-Xylene*	320	0.017 U	0.012 U	0.012 U	0.012 U	0.11
o-Xylene*	320	0.017 U	0.012 U	0.012 U	0.012 U	0.12
Xylenes, Total	320	NA	NA	NA	NA	NA
NOTES:		•				

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7)* The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued) Tier 1 Screening: Soil Inhalation Exposure Route Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dont	h (feet below grou	nd surface)/Conco	ntration
	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001
Compound/Analyte	Level (mg/kg)	4-5	5B04-001 5-7	2-3	9-10	2-3
Compound/Analyte	Level (Ilig/Kg)		atiles (mg/kg)	2-3	<i>7</i> -10	2-3
Bis(2-chloroethoxy)methane	I I	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Bis(2-chloroethyl)ether	0.66	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Bis(2-ethylhexyl)phthalate	31.000	0.44 U	1.1	0.38 U	0.39 U	0.38 U
4-Bromophenyl phenyl ether		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Butyl benzyl phthalate	930	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Carbazole		0.44 U	0.41 U	0.67	0.39 U	2.2
4-Chloro-3-methylphenol		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4-Chloroaniline		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Chloronaphthalene		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Chlorophenol	53,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4-Chlorophenyl phenyl ether		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Dibenzofuran		0.44 U	0.41 U	0.38 U	0.39 U	0.4
1,2-Dichlorobenzene	310	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
1,3-Dichlorobenzene +	570	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
1,4-Dichlorobenzene	340	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
3,3´-Dichlorobenzidine		0.89 U	0.82 U	0.76 U	0.78 U	0.76 U
2,4-Dichlorophenol		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Diethyl phthalate	2,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Dimethyl phthalate +	1,300	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Di-n-butyl phthalate	2,300	0.44 U	0.45	0.38 U	0.39 U	0.38 U
2,4-Dimethylphenol		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4,6-Dinitro-2-methylphenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
2,4-Dinitrophenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
2,4-Dinitrotoluene		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2,6-Dinitrotoluene		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Di-n-octyl phthalate	10,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachlorobenzene	2.6	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachlorobutadiene +	180	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachlorocyclopentadiene	1.1	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachloroethane		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Isophorone	4,600	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Methylnaphthalene		0.44 U	0.41 U	0.54	0.39 U	2.7
2-Methylphenol		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4-Methylphenol		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Nitroaniline +	7.5	2.1 U	2 U	1.8 U	1.9 U	1.8 U
3-Nitroaniline		2.1 U	2 U	1.8 U	1.9 U	1.8 U
4-Nitroaniline		2.1 U	2 U	1.8 U	1.9 U	1.8 U
Nitrobenzene	9.4	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Nitrophenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
4-Nitrophenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
N-Nitrosodi-n-propylamine		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
N-Nitrosodiphenylamine		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2, 2'-Oxybis(1-Chloropropane)		0.019 U	0.017 U	0.016 U	0.017 U	0.016 U
Pentachlorophenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
Phenol		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
1,2,4-Trichlorobenzene	920	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2,4,5-Trichlorophenol		0.89 U	0.82 U	0.76 U	0.78 U	0.76 U
2,4,6-Trichlorophenol	540	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001		
Compound/Analyte	Level (mg/kg)	4-5	5-7	2-3	9-10	2-3		
Compound/Intalyte	Ecver (mg/kg)	PAHs (mg/kg)	5 ,	20	<i>y</i> 10			
Acenaphthene	I	0.034 U	0.17	0.84	0.03 U	1.4		
Acenaphthylene		0.034 U	0.13	1.3	0.03 U	0.59		
Anthracene		0.034 U	0.7	1.1	0.03 U	1.7		
Benzo(a)anthracene		0.034 U	0.78	3	0.03 U	3.3		
Benzo(b)fluoranthene		0.034 U	1.1	1.9	0.03 U	2		
Benzo(k)fluoranthene		0.034 U	0.91	2.5	0.03 U	2.4		
Benzo(g,h,i)perylene		0.034 U	1.2	1.2	0.03 U	1.4		
Benzo(a)pyrene		0.034 U	0.75	3.3	0.03 U	3.3		
Chrysene		0.034 U	1.7	3.5	0.03 U	4.2		
Dibenzo(a,h)anthracene		0.034 U	0.41	0.55	0.03 U	0.71		
Fluoranthene		0.034 U	2.4	4.3	0.03 U	7.2		
Fluorene		0.034 U	0.31	0.77	0.03 U	1.5		
Indeno(1,2,3-cd)pyrene		0.034 U	0.74	1.3	0.03 U	1.6		
Naphthalene	1.8	0.034 U	0.15	0.22	0.03 U	4.2		
Phenanthrene		0.034 U	1.5	2.9	0.03 U	7		
Pyrene		0.034 U	3.4	6.6	0.03 U	6.1		
		PCBs (mg/kg)	•	•				
Aroclor 1016		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U		
Aroclor 1221		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U		
Aroclor 1232		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U		
Aroclor 1242		0.1 U	5.8	0.092 U	0.095 U	0.29		
Aroclor 1248		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U		
Aroclor 1254		0.2 U	3.4	0.19 U	0.19 U	0.29		
Aroclor 1260		0.2 U	0.19 U	0.19 U	0.19 U	0.18 U		
Total PCBs		0.900 U	9.774	0.840 U	0.855 U	1.128		
	Priority		and Total Cyanide	· U U/				
Antimony		1.2 UJ	1.4 J	1.1 UJ	1.1 UJ	1.1 UJ		
Arsenic	25,000	3.6 J	8.1 J	9	5.8 J	7.3		
Barium	870,000	58 J	260 J	78 J	18 J	160 J		
Beryllium	44,000	1.3	0.72	1.1	0.97	0.95		
Cadmium	59,000	0.6 U	3	1.1	0.55 U	1.2		
Chromium	690	20 J	570 J	14 J	15 J	13 J		
Copper		18 J	220 J	140 J	19 J	35 J		
Lead		17	280	160 J	13	450 J		
Mercury	52,000	0.031 U	0.31	0.32	0.027 U	0.22		
Nickel	440,000	24 J	76 J	20 J	23 J	17 J		
Selenium		1.2 U	1.2 U	1.1 U	1.1 U	1.1 U		
Silver		1.2 U	1.3	1.1 U	1.1 U	1.1 U		
Thallium		1.2	1.2 U	1.1 U	1.5	1.1 U		
Zinc		63 J	780 J	240 J	37 J	320 J		
Total Cyanide		0.31 U	0.33 U	0.27 U	0.31 U	0.25 U		

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued) Tier 1 Screening: Soil Inhalation Exposure Route Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	A		th (feet below grou		
	Screening	SP06-002	SP06-003	SP07-001	SP07-002	SP07-003
Compound/Analyte	Level (mg/kg)	3-4	8-10	1-2	9-10	16-17
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.16	0.092 U	0.06 U	0.068 U	0.046 U
Benzene	2.2	0.78	0.056	0.012 U	0.014 U	0.0093 U
Bromodichloromethane	3,000	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Bromoform	140	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Bromomethane	3.9	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
2-Butanone		0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Carbon Disulfide	9	0.025 U	0.018 U	0.04	0.014 U	0.0093 U
Carbon Tetrachloride	0.9	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Chlorobenzene	1.3	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Chloroethane +	94	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Chloroform	0.76	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Chloromethane +	1.1	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Dibromochloromethane	1,300	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1-Dichloroethane	130	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,2-Dichloroethane	0.99	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1-Dichloroethene	300	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
cis-1,2-Dichloroethene	1,200	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
trans-1,2-Dichloroethene	3,100	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,2-Dichloropropane	0.5	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
cis-1,3-Dichloropropene	0.39	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
trans-1,3-Dichloropropene	0.39	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Ethylbenzene	58	3	0.38	0.013	0.014 U	0.0093 U
2-Hexanone +	0.72	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
4-Methyl-2-Pentanone		0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Methylene Chloride	34	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1,2,2-Tetrachloroethane +	2,000	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Tetrachloroethene	28	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Toluene	42	0.79	0.044	0.012	0.014 U	0.0093 U
1,1,1-Trichloroethane	1,200	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1,2-Trichloroethane	1,800	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Trichloroethene	12	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Vinyl Chloride	1.1	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
m,p-Xylene*	320	3	0.098	0.016	0.014 U	0.0093 U
o-Xylene*	320	2	0.17	0.012 U	0.014 U	0.0093 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7)* The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued) Tier 1 Screening: Soil Inhalation Exposure Route Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	h (feet below grou	nd surface)/Concer	
	Screening	SP06-002	SP06-003	SP07-001	SP07-002	SP07-003
Compound/Analyte	Level (mg/kg)	3-4	8-10	1-2	9-10	16-17
	·	TCL Semivol	atiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Bis(2-chloroethyl)ether **	0.66	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4-Bromophenyl phenyl ether		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Butyl benzyl phthalate	930	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Carbazole		0.39 U	1.4	0.47	0.38 U	0.39 U
4-Chloro-3-methylphenol		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4-Chloroaniline		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Chloronaphthalene		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Chlorophenol	53,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4-Chlorophenyl phenyl ether		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Dibenzofuran		1.3	1.6	0.37 U	0.38 U	0.39 U
1,2-Dichlorobenzene	310	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
1,3-Dichlorobenzene +	570	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
1,4-Dichlorobenzene	340	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
3,3'-Dichlorobenzidine		0.78 U	2.2 U	0.74 U	0.76 U	0.79 U
2,4-Dichlorophenol		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Diethyl phthalate	2,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Dimethyl phthalate +	1,300	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Di-n-butyl phthalate	2,300	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2,4-Dimethylphenol		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4,6-Dinitro-2-methylphenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
2,4-Dinitrophenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
2,4-Dinitrotoluene		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2,6-Dinitrotoluene		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Di-n-octyl phthalate	10,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Hexachlorobenzene	2.6	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Hexachlorobutadiene +	180	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Hexachlorocyclopentadiene	1.1	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Hexachloroethane		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Isophorone	4,600	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Methylnaphthalene		20	17	0.4	0.38 U	0.39 U
2-Methylphenol		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4-Methylphenol		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Nitroaniline +	7.5	1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
3-Nitroaniline		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
4-Nitroaniline		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
Nitrobenzene	9.4	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Nitrophenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
4-Nitrophenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
N-Nitrosodi-n-propylamine		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
N-Nitrosodiphenylamine		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.046 U	0.016 U	0.016 U	0.017 U
Pentachlorophenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
Phenol		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
1,2,4-Trichlorobenzene	920	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2,4,5-Trichlorophenol		0.78 U	2.2 U	0.74 U	0.76 U	0.79 U
2.4.6 Trichlorenhanel	540	0.20 11	1 1 TT	0.27 II	0.20 11	0.20 11

NOTES

2,4,6-Trichlorophenol

540

0.39 U

1.1 U

0.37 U

0.38 U

0.39 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) **} Several values exceeded TACO screening level but were consistently non-detect, so no values were shaded.

^{(6) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁷⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SP06-002	SP06-003	SP07-001	SP07-002	SP07-003		
Compound/Analyte	Level (mg/kg)	3-4	8-10	1-2	9-10	16-17		
	<u>, , , , , , , , , , , , , , , , , , , </u>	PAHs ((mg/kg)		<u> </u>			
Acenaphthene		10	4.5	0.28 U	0.029 U	0.03 U		
Acenaphthylene		2	4.2	0.39	0.029 U	0.03 U		
Anthracene		9.6	4.9	0.54	0.029 U	0.03 U		
Benzo(a)anthracene		3.9	4.2	1.5	0.029 U	0.03 U		
Benzo(b)fluoranthene		1.1	1.3	1.3	0.029 U	0.03 U		
Benzo(k)fluoranthene		0.89	1.1	0.98	0.029 U	0.03 U		
Benzo(g,h,i)perylene		1.2	0.82 U	0.77	0.029 U	0.03 U		
Benzo(a)pyrene		2.7	0.97	1.6	0.029 U	0.03 U		
Chrysene		5.1	4.3	1.6	0.029 U	0.03 U		
Dibenzo(a,h)anthracene		0.52	0.82 U	0.28 U	0.029 U	0.03 U		
Fluoranthene		9.1	6.8	2.5	0.029 U	0.03 U		
Fluorene		10	6.5	0.28 U	0.029 U	0.03 U		
Indeno(1,2,3-cd)pyrene		1.2	0.82 U	0.71	0.029 U	0.03 U		
Naphthalene	1.8	27	13	0.28	0.029 U	0.03 U		
Phenanthrene		34	21	2.1	0.029 U	0.03 U		
Pyrene		15	10	2.8	0.029 U	0.03 U		
		PCBs (mg/kg)					
Aroclor 1016		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U		
Aroclor 1221		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U		
Aroclor 1232		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U		
Aroclor 1242		0.094 U	0.09 U	1.5	0.09 U	0.096 U		
Aroclor 1248		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U		
Aroclor 1254		0.19 U	0.18 U	0.91 U	0.18 U	0.19 U		
Aroclor 1260		0.19 U	0.18 U	0.18 U	0.18 U	0.19 U		
Total PCBs		0.850 U	0.810 U	2.954	0.810 U	0.860 U		
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)				
Antimony		1.1 UJ	NA	1 UJ	1.1 UJ	1.1 UJ		
Arsenic	25,000	6.5 J	NA	4.4	7.7 J	8.1 J		
Barium	870,000	67 J	NA	370 J	38 J	98 J		
Beryllium	44,000	1	NA	5.7	0.98	1.2		
Cadmium	59,000	0.98	NA	1.4	0.54 U	0.57 U		
Chromium	690	12 J	NA	120 J	17 J	21 J		
Copper		71 J	NA	400 J	28 J	24 J		
Lead		190	NA	180 J	55	16		
Mercury	52,000	0.15	NA	0.091	0.029 U	0.032 U		
Nickel	440,000	17 J	NA	17 J	33 J	31 J		
Selenium		1.1 U	NA	2.8	1.1 U	1.1 U		
Silver		1.1 U	NA	1 U	1.1 U	1.1 U		
Thallium		1.1 U	NA	1 U	1.4	2.1		
Zinc		190 J	NA	180 J	69 J	39 J		
Total Cyanide		0.26 U	NA	0.26 U	0.27 U	0.29 U		

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) NA Not analyzed.
- $(9) \ Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	ind surface)/Conce	ntration
	Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002
Compound/Analyte	Level (mg/kg)	0-0.5	7-8	3-5	1-2	6-7
	·	TCL Volat	iles (mg/kg)			
Acetone	100,000	0.047 U	0.097	0.12	0.062	0.071 U
Benzene	2.2	0.0095 U	0.011 U	0.19	0.0092	3.6
Bromodichloromethane	3,000	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Bromoform	140	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Bromomethane	3.9	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
2-Butanone		0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Carbon Disulfide	9	0.0095 U	0.011 U	0.013	0.0074 U	0.014 U
Carbon Tetrachloride	0.9	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chlorobenzene	1.3	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chloroethane +	94	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Chloroform	0.76	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chloromethane +	1.1	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Dibromochloromethane	1,300	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1-Dichloroethane	130	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,2-Dichloroethane	0.99	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1-Dichloroethene	300	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
cis-1,2-Dichloroethene	1,200	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
trans-1,2-Dichloroethene	3,100	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,2-Dichloropropane	0.5	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
cis-1,3-Dichloropropene	0.39	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
trans-1,3-Dichloropropene	0.39	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Ethylbenzene	58	0.0095 U	0.011 U	0.07	0.014	8.2
2-Hexanone +	0.72	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
4-Methyl-2-Pentanone		0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Methylene Chloride	34	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1,2,2-Tetrachloroethane +	2,000	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Tetrachloroethene	28	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Toluene	42	0.0095 U	0.011 U	0.011 U	0.0087	0.014 U
1,1,1-Trichloroethane	1,200	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1,2-Trichloroethane	1,800	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Trichloroethene	12	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Vinyl Chloride	1.1	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
m,p-Xylene*	320	0.0095 U	0.011 U	0.013	0.021	5
o-Xylene*	320	0.0095 U	0.011 U	0.087	0.014	1.4
Xylenes, Total	320	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) Shaded value exceeds Tier 1 screening level.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

- (7) NA Not analyzed.
 (8) * The "total xylenes" screening level was used because it is more conservative.
 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Tier 1 Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002	
Compound/Analyte	Level (mg/kg)	0-0.5	5P08-002 7-8	3-5	1-2	6-7	
Compound/Anaryte	Level (Ilig/kg)		latiles (mg/kg)	3-3	1-2	0-7	
Bis(2-chloroethoxy)methane		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Bis(2-chloroethyl)ether	0.66	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Bis(2-ethylhexyl)phthalate	31,000	2.9	0.4 U	0.75	2.1	0.39 U	
4-Bromophenyl phenyl ether	31,000	0.41 U	0.4 U	0.73 0.37 U	0.36 U	0.39 U	
Butyl benzyl phthalate	930	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Carbazole		0.41 U	0.4 U	3.7	1.1	0.39 U	
4-Chloro-3-methylphenol		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
4-Chloroaniline		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2-Chloronaphthalene		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2-Chlorophenol	53,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
4-Chlorophenyl phenyl ether		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Dibenzofuran		0.41 U	0.4 U	0.65	2	1.2	
1.2-Dichlorobenzene	310	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
1,3-Dichlorobenzene +	570	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
1,4-Dichlorobenzene	340	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
3,3´-Dichlorobenzidine		0.41 U	0.4 U	0.37 U	0.72 U	0.77 U	
2,4-Dichlorophenol		0.41 U	0.8 U	0.73 U	0.72 U	0.77 U	
Diethyl phthalate	2,000	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Dimethyl phthalate +	1,300	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Di-n-butyl phthalate	2,300	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2,4-Dimethylphenol		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U	
2,4-Dinitrophenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U	
2,4-Dinitrophenoi		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2,6-Dinitrotoluene		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Di-n-octyl phthalate	10,000	0.71	0.4 U	0.37 U	0.36 U	0.39 U	
Hexachlorobenzene	2.6	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Hexachlorobutadiene +	180	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Hexachlorocyclopentadiene	1.1	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Hexachloroethane		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
Isophorone	4,600	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2-Methylnaphthalene		0.41 U	0.4 U	0.37 U	27	23	
2-Methylphenol		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
4-Methylphenol		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2-Nitroaniline +	7.5	2 U	1.9 U	1.8 U	1.8 U	1.9 U	
3-Nitroaniline		2 U	1.9 U	1.8 U	1.8 U	1.9 U	
4-Nitroaniline		2 U	1.9 U	1.8 U	1.8 U	1.9 U	
Nitrobenzene	9.4	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2-Nitrophenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U	
4-Nitrophenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U	
N-Nitrosodi-n-propylamine		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
N-Nitrosodiphenylamine		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.017 U	0.016 U	0.015 U	0.016 U	
Pentachlorophenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U	
Phenol		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
1,2,4-Trichlorobenzene	920	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
2,4,5-Trichlorophenol		0.81 U	0.8 U	0.75 U	0.72 U	0.77 U	
2,4,6-Trichlorophenol	540	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U	
NOTES:							

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued)

Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	h (feet below grou	nd surface)/Concer	ntration
	Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002
Compound/Analyte	Level (mg/kg)	0-0.5	7-8	3-5	1-2	6-7
	·	PAHs ((mg/kg)			
Acenaphthene		0.031 U	0.003 U	0.51	2.4	8.6
Acenaphthylene		0.28	0.0052	0.36	1.9	5.1
Anthracene		0.4	0.011	2.3	7.1	8.6
Benzo(a)anthracene		1.4	0.029	3.3	1.6	1.7
Benzo(b)fluoranthene		1.2	0.035	2.3	3.5	2.5
Benzo(k)fluoranthene		0.9	0.027	2.3	3.4	1.7
Benzo(g,h,i)perylene		0.9	0.015	0.74	3.6	1.6
Benzo(a)pyrene		1.7	0.031	1.6	3.9	2.2
Chrysene		1.5	0.035	3.8	9	11
Dibenzo(a,h)anthracene		0.33	0.006	0.31	1.2	0.59
Fluoranthene		1.7	0.043	5.3	11	6.8
Fluorene		0.078	0.0052	0.92	6.9	6.7
Indeno(1,2,3-cd)pyrene		0.83	0.014	0.69	2.6	1.1
Naphthalene	1.8	0.041	0.004	0.52	10	18
Phenanthrene		1	0.032	5.2	24	26
Pyrene		2.1	0.056	5.1	14	14
		PCBs (mg/kg)			
Aroclor 1016		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U
Aroclor 1221		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U
Aroclor 1232		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U
Aroclor 1242		0.37	0.098 U	0.39	3.9	0.094 U
Aroclor 1248		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U
Aroclor 1254		0.28	0.2 U	0.41	3.3	0.19 U
Aroclor 1260		0.2 U	0.2 U	0.18 U	0.18 U	0.19 U
Total PCBs		1.246	0.890 U	1.332	7.740	0.850 U
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony		1.2 UJ	1.1 UJ	1 UJ	1.1 J	1.1 UJ
Arsenic	25,000	7.2	2.8 J	7.8 J	7.2	13 J
Barium	870,000	76 J	31 J	140 J	140 J	80 J
Beryllium	44,000	1.1	1.1	0.6	0.84	1.1
Cadmium	59,000	0.75	0.54 U	1.1	1.9	0.55 U
Chromium	690	15 J	18 J	98 J	26 J	18 J
Copper		50 J	22 J	68 J	120 J	32 J
Lead		200 J	18	340	260 J	25
Mercury	52,000	1.4	0.033	0.21	0.3	0.027 U
Nickel	440,000	19 J	24 J	38 J	25 J	35 J
Selenium		1.2 U	1.1 U	1 U	0.9 U	1.1 U
Silver		1.2 U	1.1 U	1 U	0.9 U	1.1 U
Thallium		1.2 U	1.5	1 U	1.3	2
Zinc		170 J	42 J	240 J	830 J	53 J
Total Cyanide		0.33 U	0.3 U	0.29 U	0.36	0.31 U

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	ind surface)/Conce	ntration
	Screening	SP10-003	SP11-001	SP11-002	SP13-001	SP13-002
Compound/Analyte	Level (mg/kg)	13-14	0-0.5	9-10	1-2	6-7
	·	TCL Volat	iles (mg/kg)			
Acetone	100,000	0.053 U	0.057 U	0.078	0.062	0.12
Benzene	2.2	0.92	0.011 U	0.013 U	0.012 U	0.012 U
Bromodichloromethane	3,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Bromoform	140	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Bromomethane	3.9	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
2-Butanone		0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Carbon Disulfide	9	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Carbon Tetrachloride	0.9	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Chlorobenzene	1.3	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Chloroethane +	94	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Chloroform	0.76	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Chloromethane +	1.1	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Dibromochloromethane	1,300	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1-Dichloroethane	130	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,2-Dichloroethane	0.99	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1-Dichloroethene	300	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
cis-1,2-Dichloroethene	1,200	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
trans-1,2-Dichloroethene	3,100	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,2-Dichloropropane	0.5	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
cis-1,3-Dichloropropene	0.39	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
trans-1,3-Dichloropropene	0.39	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Ethylbenzene	58	9	0.011 U	0.013 U	0.012 U	0.012 U
2-Hexanone +	0.72	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
4-Methyl-2-Pentanone		0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Methylene Chloride	34	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1,2,2-Tetrachloroethane +	2,000	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Tetrachloroethene	28	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Toluene	42	0.6	0.011 U	0.013 U	0.012 U	0.012 U
1,1,1-Trichloroethane	1,200	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1,2-Trichloroethane	1,800	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Trichloroethene	12	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Vinyl Chloride	1.1	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
m,p-Xylene*	320	3.8	0.011 U	0.013 U	0.012 U	0.012 U
o-Xylene*	320	12	0.011 U	0.013 U	0.012 U	0.012 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7)* The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	ind surface)/Concer	ntration
	Screening	SP10-003	SP11-001	SP11-002	SP13-001	SP13-002
Compound/Analyte	Level (mg/kg)	13-14	0-0.5	9-10	1-2	6-7
		TCL Semivol	latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Bis(2-chloroethyl)ether	0.66	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Bis(2-ethylhexyl)phthalate	31,000	0.38 U	1.1	0.38 U	0.36 U	0.4 U
4-Bromophenyl phenyl ether		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Butyl benzyl phthalate	930	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Carbazole		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
4-Chloro-3-methylphenol		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
4-Chloroaniline		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2-Chloronaphthalene		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2-Chlorophenol	53,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
4-Chlorophenyl phenyl ether		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Dibenzofuran		0.75	0.38 U	0.38 U	0.36 U	0.4 U
1,2-Dichlorobenzene	310	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
1,3-Dichlorobenzene +	570	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
1,4-Dichlorobenzene	340	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
3,3´-Dichlorobenzidine		0.77 U	0.76 U	0.77 U	0.73 U	0.8 U
2,4-Dichlorophenol		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Diethyl phthalate	2,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Dimethyl phthalate +	1,300	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Di-n-butyl phthalate	2,300	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2,4-Dimethylphenol		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
4,6-Dinitro-2-methylphenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
2,4-Dinitrophenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
2,4-Dinitrotoluene		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2,6-Dinitrotoluene		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Di-n-octyl phthalate	10,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Hexachlorobenzene	2.6	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Hexachlorobutadiene +	180	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Hexachlorocyclopentadiene	1.1	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Hexachloroethane		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
Isophorone	4,600	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2-Methylnaphthalene		20	1.1	0.42	0.86	0.53
2-Methylphenol		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
4-Methylphenol		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2-Nitroaniline +	7.5	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
3-Nitroaniline		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
4-Nitroaniline		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
Nitrobenzene	9.4	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2-Nitrophenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
4-Nitrophenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
N-Nitrosodi-n-propylamine		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
N-Nitrosodiphenylamine		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.016 U	0.015 U	0.017 U
Pentachlorophenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U
Phenol		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
1,2,4-Trichlorobenzene	920	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U
2,4,5-Trichlorophenol		0.77 U	0.76 U	0.77 U	0.73 U	0.8 U
2,4,6-Trichlorophenol	540	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U

⁽¹⁾ mg/kg - milligrams per kilogram.

 $[\]eqno(2) TCL - Target compound \ list.$

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004). (6) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued)

Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample 1	Location and Dept	h (feet below grou	ind surface)/Conce	ntration
	Screening	SP10-003	SP11-001	SP11-002	SP13-001	SP13-002
Compound/Analyte	Level (mg/kg)	13-14	0-0.5	9-10	1-2	6-7
		PAHs ((mg/kg)			
Acenaphthene		5.5	1.1	0.046	0.16	0.056
Acenaphthylene		3.7	0.86	0.029 U	0.069	0.03 U
Anthracene		3.1	2.5	0.029 U	0.13	0.03 U
Benzo(a)anthracene		0.37	0.9	0.029 U	0.037	0.03 U
Benzo(b)fluoranthene		0.42	1.7	0.029 U	0.13	0.03 U
Benzo(k)fluoranthene		0.49	1.6	0.029 U	0.11	0.03 U
Benzo(g,h,i)perylene		0.51	0.62	0.029 U	0.2	0.03 U
Benzo(a)pyrene		0.45	1.8	0.029 U	0.094	0.03 U
Chrysene		2.2	3.1	0.032	0.26	0.03 U
Dibenzo(a,h)anthracene		0.13	0.3	0.029 U	0.084	0.03 U
Fluoranthene		1.8	3.7	0.037	0.21	0.03 U
Fluorene		3.8	1.3	0.029 U	0.15	0.03 U
Indeno(1,2,3-cd)pyrene		0.26	0.44	0.029 U	0.14	0.03 U
Naphthalene	1.8	27	1.5	0.73	0.83	0.99
Phenanthrene		9.3	6.5	0.092	0.34	0.04
Pyrene		3	7.8	0.063	0.28	0.03 U
		PCBs (mg/kg)			
Aroclor 1016		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1221		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1232		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1242		0.09 U	0.49	0.094 U	0.98	0.097 U
Aroclor 1248		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U
Aroclor 1254		0.18 U	0.45	0.19 U	0.9 U	0.19 U
Aroclor 1260		0.18 U	0.18 U	0.19 U	0.18 U	0.19 U
Total PCBs		0.810 U	1.488	0.850 U	2.420	0.865 U
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony		1.1 UJ	1.1 UJ	1.1 UJ	1 J	1.1 UJ
Arsenic	25,000	7.5 J	5.4	11 J	7.3	9.4 J
Barium	870,000	83 J	120 J	100 J	86 J	86 J
Beryllium	44,000	1.1	1.1	1.1	0.79	1.2
Cadmium	59,000	0.55 U	1.2	0.56 U	0.7	0.57 U
Chromium	690	19 J	16 J	20 J	14 J	20 J
Copper		31 J	90 J	32 J	40 J	34 J
Lead		18	140 J	19	250 J	20
Mercury	52,000	0.028	0.1	0.028 U	2.9	0.03
Nickel	440,000	39 J	26 J	37 J	19 J	34 J
Selenium		1.1 U	1.1 U	1.1 U	1 U	1.1 U
Silver		1.1 U	1.1 U	1.1 U	1 U	1.1 U
Thallium		2.5	1.5	2	1.5	2
Zinc		49 J	220 J	47 J	94 J	45 J
Total Cyanide		0.25 U	0.89	0.27 U	0.26 U	0.3 U

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	nd surface)/Conce	ntration
	Screening	SP13-003	SB14-001	SB14-002	SB15-001	SB15-002
Compound/Analyte	Level (mg/kg)	15-16	1-2	6-8	0-0.5	6-8
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.055 U	0.051 U	0.078	0.037 U	0.051 U
Benzene	2.2	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromodichloromethane	3,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromoform	140	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromomethane	3.9	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
2-Butanone		0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Carbon Disulfide	9	0.011 U	0.01 U	0.015 U	0.0074 U	0.018
Carbon Tetrachloride	0.9	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chlorobenzene	1.3	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chloroethane +	94	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Chloroform	0.76	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chloromethane +	1.1	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Dibromochloromethane	1,300	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1-Dichloroethane	130	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,2-Dichloroethane	0.99	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1-Dichloroethene	300	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
cis-1,2-Dichloroethene	1,200	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
trans-1,2-Dichloroethene	3,100	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,2-Dichloropropane	0.5	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
cis-1,3-Dichloropropene	0.39	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
trans-1,3-Dichloropropene	0.39	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Ethylbenzene	58	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
2-Hexanone +	0.72	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
4-Methyl-2-Pentanone		0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Methylene Chloride	34	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,2,2-Tetrachloroethane +	2,000	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Tetrachloroethene	28	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Toluene	42	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,1-Trichloroethane	1,200	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,2-Trichloroethane	1,800	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Trichloroethene	12	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Vinyl Chloride	1.1	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
m,p-Xylene*	320	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
o-Xylene*	320	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7)* The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Tier 1	SP13-003			SB15-001	SB15-002	
Compound/Analysis	Screening	SP13-003 15-16	SB14-001 1-2	SB14-002 6-8	0-0.5	SB15-002 6-8	
Compound/Analyte	Level (mg/kg)		atiles (mg/kg)	0-8	0-0.5	0-8	
Bis(2-chloroethoxy)methane	II II	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
Bis(2-chloroethyl)ether	0.66	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
Bis(2-ethylhexyl)phthalate	31.000	0.39 U	0.33 0	0.42 U	0.4 0	0.39 U	
4-Bromophenyl phenyl ether	31,000	0.39 U	0.49 0.35 U	0.42 U	0.58 0.4 U	0.39 U	
Butyl benzyl phthalate	930	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
Carbazole	930	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
4-Chloro-3-methylphenol		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
4-Chloroaniline		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
2-Chloronaphthalene		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
2-Chlorophenol	53.000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
4-Chlorophenyl phenyl ether		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
Dibenzofuran		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
1,2-Dichlorobenzene	310	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
1,3-Dichlorobenzene +	570	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
1,4-Dichlorobenzene	340	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
3,3´-Dichlorobenzidine	340	0.39 U	0.33 U 0.71 U	0.42 U	0.4 U	0.39 U 0.78 U	
2,4-Dichlorophenol		0.78 U	0.71 U	0.42 U	0.81 U	0.78 U	
Diethyl phthalate	2,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
Dimethyl phthalate +	1,300	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
Di-n-butyl phthalate	2,300	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
2,4-Dimethylphenol		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
4,6-Dinitro-2-methylphenol		1.9 U	1.7 U	0.42 U	2 U	1.9 U	
2,4-Dinitrophenol		1.9 U	1.7 U	2 U	2 U	1.9 U	
2,4-Dinitrophenol 2,4-Dinitrotoluene		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
2,6-Dinitrotoluene		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
Di-n-octyl phthalate	10.000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
Hexachlorobenzene	2.6	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
Hexachlorobutadiene +	180	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
Hexachlorocyclopentadiene	1.1	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
Hexachloroethane		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
Isophorone	4,600	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
2-Methylnaphthalene	4,000	0.79	0.35 U	0.42 U	0.4 U	0.39 U	
2-Methylphenol		0.79 0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
4-Methylphenol		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
2-Nitroaniline +	7.5	1.9 U	1.7 U	2 U	2 U	1.9 U	
3-Nitroaniline		1.9 U	1.7 U	2 U	2 U	1.9 U	
4-Nitroaniline		1.9 U	1.7 U	2 U	2 U	1.9 U	
Nitrobenzene	9.4	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
2-Nitrophenol		1.9 U	1.7 U	2 U	2 U	1.9 U	
4-Nitrophenol		1.9 U	1.7 U	2 U	2 U	1.9 U	
N-Nitrosodi-n-propylamine		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
N-Nitrosodiphenylamine		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.015 U	0.018 U	0.017 U	0.017 U	
Pentachlorophenol		1.9 U	1.7 U	2 U	2 U	1.9 U	
Phenol		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
1,2,4-Trichlorobenzene	920	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
2,4,5-Trichlorophenol		0.78 U	0.71 U	0.84 U	0.81 U	0.78 U	
2,4,6-Trichlorophenol	540	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U	
NOTES:	210	0.37 0	0.55 0	0.72 0	5.7 0	0.57 0	

⁽¹⁾ mg/kg - milligrams per kilogram.

 $[\]eqno(2) TCL - Target compound \ list.$

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1				nd surface)/Conce	
	Screening	SP13-003	SB14-001	SB14-002	SB15-001	SB15-002
Compound/Analyte	Level (mg/kg)	15-16	1-2	6-8	0-0.5	6-8
		PAHs ((mg/kg)			
Acenaphthene		0.077	0.15	0.032 U	0.031 U	0.03 U
Acenaphthylene		0.03 U	0.18	0.032 U	0.13	0.03 U
Anthracene		0.03 U	0.25	0.032 U	0.031 U	0.03 U
Benzo(a)anthracene		0.03 U	3.5	0.032 U	0.15	0.03 U
Benzo(b)fluoranthene		0.03 U	1.8	0.032 U	0.13	0.03 U
Benzo(k)fluoranthene		0.03 U	1.6	0.032 U	0.13	0.03 U
Benzo(g,h,i)perylene		0.03 U	0.66	0.032 U	0.17	0.03 U
Benzo(a)pyrene		0.03 U	3	0.032 U	0.2	0.03 U
Chrysene		0.03 U	3.2	0.032 U	0.21	0.03 U
Dibenzo(a,h)anthracene		0.03 U	0.35	0.032 U	0.057	0.03 U
Fluoranthene		0.03 U	4.2	0.035	0.24	0.087
Fluorene		0.036	0.15	0.032 U	0.031 U	0.03 U
Indeno(1,2,3-cd)pyrene		0.03 U	0.67	0.032 U	0.14	0.03 U
Naphthalene	1.8	1.1	0.19	0.11	0.031 U	0.051
Phenanthrene		0.063	0.3	0.071	0.17	0.083
Pyrene		0.03 U	11	0.056	0.33	0.13
		PCBs (mg/kg)			
Aroclor 1016		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1221		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1232		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1242		0.093 U	0.12	0.1 U	0.22	0.096 U
Aroclor 1248		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1254		0.19 U	0.17 U	0.2 U	0.2 U	0.19 U
Aroclor 1260		0.19 U	0.17 U	0.2 U	0.2 U	0.19 U
Total PCBs		0.845 U	0.800	0.900 U	1.004	0.860 U
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony		1 UJ	0.98 UJ	1.1 UJ	1 UJ	1.1 UJ
Arsenic	25,000	9.6 J	3.3	15 J	9.3	12 J
Barium	870,000	74 J	32 J	31 J	150 J	26 J
Beryllium	44,000	1	0.61	1.2	0.99	1.1
Cadmium	59,000	0.66	0.59	0.57 U	2.2	0.57 U
Chromium	690	17 J	12 J	19 J	33 J	16 J
Copper		34 J	18 J	32 J	120 J	18 J
Lead		19	85 J	26	340 J	13
Mercury	52,000	0.061	0.06	0.031 U	0.23	0.027
Nickel	440,000	30 J	10 J	43 J	31 J	27 J
Selenium		1 U	0.98 U	1.1 U	1 U	1.1 U
Silver		1 U	0.98 U	1.1 U	1 U	1.1 U
Thallium		1.9	0.98 U	1.2	1	1.1
Zinc		42 J	91 J	47 J	550 J	36 J
Total Cyanide		0.26 U	0.28 U	0.32 U	0.32 U	0.27 U

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- $(7)\ Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample		th (feet below grou	nd surface)/Conce	ntration
	Screening	SB15-003	SP16-001	SP16-002	SP16-003	SB17-001
Compound/Analyte	Level (mg/kg)	10-12	2-3	9-10	15-16	1-2
	<u> </u>	TCL Volat	iles (mg/kg)			
Acetone	100,000	0.1	0.053 U	0.1	0.062 U	0.06 U
Benzene	2.2	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromodichloromethane	3,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromoform	140	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromomethane	3.9	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
2-Butanone		0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Carbon Disulfide	9	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Carbon Tetrachloride	0.9	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chlorobenzene	1.3	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chloroethane +	94	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Chloroform	0.76	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chloromethane +	1.1	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Dibromochloromethane	1,300	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1-Dichloroethane	130	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,2-Dichloroethane	0.99	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1-Dichloroethene	300	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
cis-1,2-Dichloroethene	1,200	0.011 U	0.053	0.0098 U	0.012 U	0.012 U
trans-1,2-Dichloroethene	3,100	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,2-Dichloropropane	0.5	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
cis-1,3-Dichloropropene	0.39	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
trans-1,3-Dichloropropene	0.39	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Ethylbenzene	58	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
2-Hexanone +	0.72	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
4-Methyl-2-Pentanone		0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Methylene Chloride	34	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,2,2-Tetrachloroethane +	2,000	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Tetrachloroethene	28	0.011 U	0.1	0.0098 U	0.012 U	0.012 U
Toluene	42	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,1-Trichloroethane	1,200	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,2-Trichloroethane	1,800	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Trichloroethene	12	0.011 U	0.017	0.0098 U	0.012 U	0.012 U
Vinyl Chloride	1.1	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
m,p-Xylene*	320	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
o-Xylene*	320	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7)* The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB15-003	SP16-001	SP16-002	SP16-003	SB17-001	
Compound/Analyte	Level (mg/kg)	10-12	2-3	9-10	15-16	1-2	
, and the second second	8 8	TCL Semivol	atiles (mg/kg)	<u> </u>			
Bis(2-chloroethoxy)methane		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Bis(2-chloroethyl)ether	0.66	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Bis(2-ethylhexyl)phthalate	31,000	0.42 U	1.6	0.39 U	0.39 U	0.94	
4-Bromophenyl phenyl ether		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Butyl benzyl phthalate	930	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Carbazole		0.42 U	0.75	0.39 U	0.39 U	0.36 U	
4-Chloro-3-methylphenol		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
4-Chloroaniline		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2-Chloronaphthalene		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2-Chlorophenol	53,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
4-Chlorophenyl phenyl ether		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Dibenzofuran		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
1,2-Dichlorobenzene	310	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
1,3-Dichlorobenzene +	570	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
1,4-Dichlorobenzene	340	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
3,3´-Dichlorobenzidine		0.85 U	0.73 U	0.77 U	0.77 U	0.73 U	
2,4-Dichlorophenol		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Diethyl phthalate	2,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Dimethyl phthalate +	1,300	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Di-n-butyl phthalate	2,300	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2,4-Dimethylphenol		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
4,6-Dinitro-2-methylphenol		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U	
2,4-Dinitrophenol		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U	
2,4-Dinitrotoluene		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2,6-Dinitrotoluene		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Di-n-octyl phthalate	10,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Hexachlorobenzene	2.6	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Hexachlorobutadiene +	180	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Hexachlorocyclopentadiene	1.1	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Hexachloroethane		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
Isophorone	4,600	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2-Methylnaphthalene		0.42 U	0.64	0.39 U	0.39 U	0.36 U	
2-Methylphenol		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
4-Methylphenol		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2-Nitroaniline +	7.5	2.1 U	1.8 U	1.9 U	1.9 U	1.8 U	
3-Nitroaniline		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U	
4-Nitroaniline		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U	
Nitrobenzene	9.4	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2-Nitrophenol		2.1 U 2.1 U	1.8 U 1.8 U	1.9 U 1.9 U	1.9 U 1.9 U	1.8 U 1.8 U	
4-Nitrophenol							
N-Nitrosodi-n-propylamine N-Nitrosodiphenylamine		0.42 U 0.42 U	0.36 U 0.36 U	0.39 U 0.39 U	0.39 U 0.39 U	0.36 U 0.36 U	
2, 2'-Oxybis(1-Chloropropane)		0.42 U 0.018 U	0.36 U 0.015 U	0.39 U 0.016 U	0.39 U 0.016 U	0.36 U 0.015 U	
2, 2 -Oxybis(1-Chioropropane) Pentachlorophenol		2.1 U	1.8 U	0.016 U	0.016 U	0.015 U	
Pentachlorophenol Phenol		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
1,2,4-Trichlorobenzene	920	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U	
2,4,5-Trichlorophenol	920	0.42 U	0.36 U	0.39 U 0.77 U	0.39 U 0.77 U	0.36 U	
2,4,6-Trichlorophenol	540	0.83 U 0.42 U	0.73 U	0.77 U	0.77 U	0.73 U 0.36 U	
NOTES:	J+U	0.42 U	0.30 U	U.39 U	0.39 U	0.30 U	

⁽¹⁾ mg/kg - milligrams per kilogram.

 $[\]eqno(2) TCL - Target compound \ list.$

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB15-003	SP16-001	SP16-002	SP16-003	SB17-001		
Compound/Analyte	Level (mg/kg)	10-12	2-3	9-10	15-16	1-2		
	1 2 2 2 2	PAHs	(mg/kg)					
Acenaphthene		0.032 U	0.5	0.029 U	0.029 U	0.036		
Acenaphthylene		0.032 U	0.15	0.029 U	0.029 U	0.049		
Anthracene		0.032 U	0.81	0.029 U	0.029 U	0.21		
Benzo(a)anthracene		0.032 U	0.36	0.029 U	0.029 U	0.089		
Benzo(b)fluoranthene		0.032 U	0.92	0.029 U	0.029 U	0.15		
Benzo(k)fluoranthene		0.032 U	1.1	0.029 U	0.029 U	0.12		
Benzo(g,h,i)perylene		0.032 U	0.81	0.029 U	0.029 U	0.034		
Benzo(a)pyrene		0.032 U	0.75	0.029 U	0.029 U	0.069		
Chrysene		0.032 U	2.3	0.029 U	0.029 U	0.087		
Dibenzo(a,h)anthracene		0.032 U	0.28	0.029 U	0.029 U	0.028 U		
Fluoranthene		0.032 U	1.8	0.029 U	0.029 U	0.12		
Fluorene		0.032 U	0.44	0.029 U	0.029 U	0.046		
Indeno(1,2,3-cd)pyrene		0.032 U	0.54	0.029 U	0.029 U	0.034		
Naphthalene	1.8	0.032 U	0.64	0.029 U	0.029 U	0.051		
Phenanthrene		0.032 U	2.2	0.029 U	0.029 U	0.21		
Pyrene		0.032 U	2.7	0.029 U	0.029 U	0.18		
		PCBs ((mg/kg)					
Aroclor 1016		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U		
Aroclor 1221		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U		
Aroclor 1232		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U		
Aroclor 1242		0.1 U	4.7	0.094 U	0.095 U	0.15		
Aroclor 1248		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U		
Aroclor 1254		0.21 U	4.3	0.19 U	0.19 U	0.18 U		
Aroclor 1260		0.21 U	0.18 U	0.19 U	0.19 U	0.18 U		
Total PCBs		0.920 U	9.532	0.850 U	0.855 U	0.862		
	Priority		and Total Cyanide					
Antimony		1.1 UJ	1.1 J	1 UJ	1.1 UJ	1 UJ		
Arsenic	25,000	5 J	6.7	12 J	9.6 J	1.4		
Barium	870,000	22 J	130 J	79 J	84 J	9.4 J		
Beryllium	44,000	1.2	1.3	1.1	1.1	0.54		
Cadmium	59,000	0.57 U	2.3	0.52 U	0.56 U	0.5 U		
Chromium	690	19 J	47 J	17 J	17 J	5.3 J		
Copper		31 J	170 J	39 J	28 J	4.9 J		
Lead		16	150 J	21	17	7.3 J		
Mercury	52,000	0.032 U	0.43	0.027 U	0.033	0.04		
Nickel	440,000	30 J	40 J	37 J	24 J	3.3 J		
Selenium		1.1 U	1 U	1 U	1.1 U	1 U		
Silver		1.1 U	1 U	1 U	1.1 U	1 U		
Thallium		2.5	1.4	1.8	1.7	1 U		
Zinc		42 J	600 J	40 J	33 J	55 J		
Total Cyanide		0.28 U	0.26 U	0.25 U	0.28 U	0.28 U		

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- $(7)\ Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	ind surface)/Conce	entration
	Screening	SB18B-001	SB19-001	SB20-001	SB21-001	SB22-002
Compound/Analyte	Level (mg/kg)	1-2	1-2	0-0.5	1-2	8-10
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.062 U	0.05	0.12	0.036	0.065
Benzene	2.2	0.012 U	0.039	0.0084 U	0.077	0.0089 U
Bromodichloromethane	3,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Bromoform	140	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Bromomethane	3.9	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
2-Butanone		0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Carbon Disulfide	9	0.012 U	0.0081 U	0.011	0.0065 U	0.0089 U
Carbon Tetrachloride	0.9	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Chlorobenzene	1.3	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Chloroethane +	94	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Chloroform	0.76	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Chloromethane +	1.1	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Dibromochloromethane	1,300	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,1-Dichloroethane	130	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,2-Dichloroethane	0.99	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,1-Dichloroethene	300	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
cis-1,2-Dichloroethene	1,200	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
trans-1,2-Dichloroethene	3,100	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,2-Dichloropropane	0.5	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
cis-1,3-Dichloropropene	0.39	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
trans-1,3-Dichloropropene	0.39	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Ethylbenzene	58	0.012 U	0.22	0.014	0.12	0.0089 U
2-Hexanone +	0.72	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
4-Methyl-2-Pentanone		0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Methylene Chloride	34	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,1,2,2-Tetrachloroethane +	2,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Tetrachloroethene	28	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Toluene	42	0.012 U	0.064	0.0097	0.018	0.0089 U
1,1,1-Trichloroethane	1,200	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,1,2-Trichloroethane	1,800	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Trichloroethene	12	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Vinyl Chloride	1.1	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
m,p-Xylene*	320	0.012 U	0.2	0.031	0.034	0.0089 U
o-Xylene*	320	0.012 U	0.12	0.011	0.036	0.0089 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7)* The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration						
	Tier 1	Sample SB18B-001		, ,	SB21-001	SB22-002	
Compound/Analyte	Screening Level (mg/kg)	1-2	SB19-001 1-2	SB20-001 0-0.5	3B21-001 1-2	8-10	
Compound/Analyte	Level (Ilig/kg)		latiles (mg/kg)	0-0.3	1-2	8-10	
Bis(2-chloroethoxy)methane	1	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
Bis(2-chloroethyl)ether	0.66	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
Bis(2-ethylhexyl)phthalate	31.000	1.2	0.63	2.7	0.59 J	0.39 U	
4-Bromophenyl phenyl ether	31,000	0.35 U	0.36 U	0.38 U	0.39 J	0.39 U	
Butyl benzyl phthalate	930	0.35 U	0.36 U	0.58	0.38 U	0.39 U	
Carbazole	930	0.35 U	3.2	0.53	0.38 U	0.39 U	
4-Chloro-3-methylphenol		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
4-Chloroaniline		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
2-Chloronaphthalene		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
2-Chlorophenol	53,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
4-Chlorophenyl phenyl ether	33,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
Dibenzofuran		0.35 U	0.94	0.38 U	0.38 U	0.39 U	
1,2-Dichlorobenzene	310	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
1,3-Dichlorobenzene +	570	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
1,4-Dichlorobenzene	340	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
3,3´-Dichlorobenzidine		0.33 U	0.72 U	0.75 U	0.75 U	0.78 U	
2,4-Dichlorophenol		0.7 U	0.72 U	0.73 U	0.73 U	0.78 U	
Diethyl phthalate	2,000	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
Dimethyl phthalate +	1,300	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
Di-n-butyl phthalate	2,300	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
2,4-Dimethylphenol	2,300	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
4,6-Dinitro-2-methylphenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U	
2,4-Dinitrophenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U	
2,4-Dinitrophenol		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
2,6-Dinitrotoluene		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
Di-n-octyl phthalate	10,000	1.6	0.36 U	0.38 U	0.38 U	0.39 U	
Hexachlorobenzene	2.6	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
Hexachlorobutadiene +	180	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
Hexachlorocyclopentadiene	1.1	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
Hexachloroethane		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
Isophorone	4.600	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
2-Methylnaphthalene		0.47	20	0.59	2.3 J	0.39 U	
2-Methylphenol		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
4-Methylphenol		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
2-Nitroaniline +	7.5	1.7 U	1.7 U	1.8 U	1.8 U	1.9 U	
3-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U	
4-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U	
Nitrobenzene	9.4	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
2-Nitrophenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U	
4-Nitrophenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U	
N-Nitrosodi-n-propylamine		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
N-Nitrosodiphenylamine		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
2, 2'-Oxybis(1-Chloropropane)		0.015 U	0.015 U	0.016 U	0.38 U	0.39 U	
Pentachlorophenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U	
Phenol		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
1,2,4-Trichlorobenzene	920	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	
2,4,5-Trichlorophenol		0.7 U	0.72 U	0.75 U	0.75 U	0.78 U	
2,4,6-Trichlorophenol	540	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U	

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽⁵⁾ J - Indicates an estimated value.

^{(6) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued)

Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB18B-001	SB19-001	SB20-001	SB21-001	SB22-002			
Compound/Analyte	Level (mg/kg)	1-2	1-2	0-0.5	1-2	8-10			
•	<u>,, , , , , , , , , , , , , , , , , , ,</u>	PAHs ((mg/kg)		<u> </u>				
Acenaphthene		0.19	3.1	0.31	3.3 J	0.031			
Acenaphthylene		0.12	2.3	0.19	2.5 J	0.029 U			
Anthracene		0.67	3.1	0.78	5 J	0.047			
Benzo(a)anthracene		0.31	1.4	0.26	1.6 J	0.029 U			
Benzo(b)fluoranthene		0.57	3.4	2	3.1 J	0.029 U			
Benzo(k)fluoranthene		0.6	3	1.9	3.5 J	0.029 U			
Benzo(g,h,i)perylene		0.8	3	0.89	3.7 J	0.029 U			
Benzo(a)pyrene		0.41	2.7	0.67	4 J	0.029 U			
Chrysene		1.7	5.4	1.4	5.6 J	0.04			
Dibenzo(a,h)anthracene		0.25	1.3	0.3	1.1 J	0.029 U			
Fluoranthene		1.2	7.4	2.4	8.1 J	0.029 U			
Fluorene		0.3	3.2	0.31	3.6 J	0.033			
Indeno(1,2,3-cd)pyrene		0.52	2.5	0.62	2.5 J	0.029 U			
Naphthalene	1.8	0.42	13	0.47	2.4 J	0.2			
Phenanthrene		1.9	9.7	2.5	13 J	0.13			
Pyrene		1.8	8.9	1.9	14 J	0.029 U			
			(mg/kg)						
Aroclor 1016		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U			
Aroclor 1221		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U			
Aroclor 1232		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U			
Aroclor 1242		1.9	0.55	1.3	0.1	0.094 U			
Aroclor 1248		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U			
Aroclor 1254		1.6	0.52	0.91 U	0.18 U	0.19 U			
Aroclor 1260		0.17 U	0.17 U	0.18 U	0.18 U	0.19 U			
Total PCBs		4.010	1.588	2.754	0.824	0.850 U			
	Priority	Pollutant Metals a							
Antimony		1 J	0.98 J	1 J	0.97 UJ	1.1 UJ			
Arsenic	25,000	4	2.5	4.3	6.9	5.7 J			
Barium	870,000	99 J	69 J	150 J	76 J	34 J			
Beryllium	44,000	0.79	0.5	0.87	0.48 U	0.57 U			
Cadmium	59,000	1.1	0.44	1.3	0.89	0.57 U			
Chromium	690	12 J	9.2 J	15 J	15 J	18 J			
Copper		67 J	33 J	37 J	48 J	26 J			
Lead		130 J	46 J	94 J	120 J	22			
Mercury	52,000	0.2	0.1	0.53	0.33	0.029			
Nickel	440,000	11 J	12 J	14 J	22 J	31 J			
Selenium		0.93 U	0.82 U	1 U 1 U	0.97 U 0.97 U	1.1 U			
Silver		0.93 U	0.82 U			1.1 U			
Thallium		1.2	1.1	1.5	0.97 U	1.2			
Zinc		240 J	98 J	210 J	150 J	46 J			
Total Cyanide		0.26 U	0.25 U	0.32 U	0.3 U	0.3 U			

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	nd surface)/Conce	ntration
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003
Compound/Analyte	Level (mg/kg)	1-2	1-2	1-2	3-5	12-14
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.056 U	0.056 U	0.12	0.11	0.058 U
Benzene	2.2	0.011 U	0.011 U	1.5	0.22	0.012 U
Bromodichloromethane	3,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Bromoform	140	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Bromomethane	3.9	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
2-Butanone		0.022 U	0.022 U	0.026	0.034 U	0.023 U
Carbon Disulfide	9	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Carbon Tetrachloride	0.9	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Chlorobenzene	1.3	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Chloroethane +	94	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
Chloroform	0.76	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Chloromethane +	1.1	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Dibromochloromethane	1,300	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1-Dichloroethane	130	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,2-Dichloroethane	0.99	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1-Dichloroethene	300	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
cis-1,2-Dichloroethene	1,200	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
trans-1,2-Dichloroethene	3,100	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,2-Dichloropropane	0.5	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
cis-1,3-Dichloropropene	0.39	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
trans-1,3-Dichloropropene	0.39	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Ethylbenzene	58	0.011 U	0.016	2.8	4.6	0.012 U
2-Hexanone +	0.72	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
4-Methyl-2-Pentanone		0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
Methylene Chloride	34	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1,2,2-Tetrachloroethane +	2,000	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Tetrachloroethene	28	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Toluene	42	0.011 U	0.011 U	0.03	0.54	0.012 U
1,1,1-Trichloroethane	1,200	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1,2-Trichloroethane	1,800	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Trichloroethene	12	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Vinyl Chloride	1.1	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
m,p-Xylene*	320	0.011 U	0.011 U	0.068	6.7	0.012 U
o-Xylene*	320	0.011 U	0.011 U	0.72	6.8	0.012 U
Xylenes, Total	320	NA	NA	NA	NA	NA

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

⁽³⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(4) --} Toxicity criteria not available for exposure route.

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ NA - Not analyzed.

^{(7)*} The "total xylenes" screening level was used because it is more conservative.
(8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003		
Compound/Analyte	Level (mg/kg)	1-2	1-2	1-2	3-5	12-14		
	8 87		atiles (mg/kg)					
Bis(2-chloroethoxy)methane		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Bis(2-chloroethyl)ether **	0.66	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Bis(2-ethylhexyl)phthalate	31,000	2.1	1.7 U	0.36 U	1.2	0.42		
4-Bromophenyl phenyl ether		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Butyl benzyl phthalate	930	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Carbazole		1.8 U	4.1	1.9	5.7	0.4 U		
4-Chloro-3-methylphenol		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
4-Chloroaniline		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2-Chloronaphthalene		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2-Chlorophenol	53,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
4-Chlorophenyl phenyl ether		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Dibenzofuran		1.8 U	1.7 U	0.84	4.7	0.4 U		
1,2-Dichlorobenzene	310	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
1,3-Dichlorobenzene +	570	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
1,4-Dichlorobenzene	340	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
3,3'-Dichlorobenzidine		3.7 U	3.5 U	0.72 U	0.81 U	0.8 U		
2,4-Dichlorophenol		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Diethyl phthalate	2,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Dimethyl phthalate +	1,300	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Di-n-butyl phthalate	2,300	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2,4-Dimethylphenol		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
4,6-Dinitro-2-methylphenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U		
2,4-Dinitrophenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U		
2,4-Dinitrotoluene		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2,6-Dinitrotoluene		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Di-n-octyl phthalate	10,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Hexachlorobenzene	2.6	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Hexachlorobutadiene +	180	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Hexachlorocyclopentadiene **	1.1	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Hexachloroethane		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
Isophorone	4,600	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2-Methylnaphthalene		1.8 U	1.7 U	4.1	58	0.4		
2-Methylphenol		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
4-Methylphenol		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2-Nitroaniline + **	7.5	8.9 U	8.4 U	1.7 U	2 U	1.9 U		
3-Nitroaniline		8.9 U	8.4 U	1.7 U	2 U	1.9 U		
4-Nitroaniline		8.9 U	8.4 U	1.7 U	2 U	1.9 U		
Nitrobenzene	9.4	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2-Nitrophenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U		
4-Nitrophenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U		
N-Nitrosodi-n-propylamine		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
N-Nitrosodiphenylamine		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2, 2'-Oxybis(1-Chloropropane)		0.078 U	0.073 U	0.015 U	0.017 U	0.017 U		
Pentachlorophenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U		
Phenol		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
1,2,4-Trichlorobenzene	920	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		
2,4,5-Trichlorophenol		3.7 U	3.5 U	0.72 U	0.81 U	0.8 U		
2,4,6-Trichlorophenol	540	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U		

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) ** Several values exceeded non-TACO or TACO screening levels but were consistently non-detect so no values were shaded.

 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued)

Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dept	h (feet below grou		
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003
Compound/Analyte	Level (mg/kg)	1-2	1-2	1-2	3-5	12-14
			mg/kg)			
Acenaphthene		2.1	0.63	8.3	19	0.03 U
Acenaphthylene		5	0.34	6.1	8.9	0.03 U
Anthracene		4.1	2.1	8.1	16	0.03 U
Benzo(a)anthracene		5.9	0.29	8	14	0.03 U
Benzo(b)fluoranthene		3.1	1.5	4	7	0.03 U
Benzo(k)fluoranthene		3.2	1.3	3.3	7	0.03 U
Benzo(g,h,i)perylene		1.6	1.5	2.3	3.7	0.03 U
Benzo(a)pyrene		5	1.7	5.1	9.2	0.03 U
Chrysene		6.6	3.6	9.1	15	0.03 U
Dibenzo(a,h)anthracene		1.4 U	0.72	0.84	0.94	0.03 U
Fluoranthene		9.4	6.4	16	20	0.03 U
Fluorene		2.4	0.67	7	26	0.067
Indeno(1,2,3-cd)pyrene		1.4 U	1.4	2.1	3.1 U	0.03 U
Naphthalene	1.8	1.8	0.65	6.7	28	0.6
Phenanthrene		10	5.4	30	62	0.15
Pyrene		14	7	24	32	0.03 U
		PCBs (
Aroclor 1016		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U
Aroclor 1221		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U
Aroclor 1232		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U
Aroclor 1242		0.95	1.1	0.086 U	0.098 U	0.096 U
Aroclor 1248		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U
Aroclor 1254		0.72	0.9	0.17 U	0.2 U	0.19 U
Aroclor 1260		0.18 U	0.17 U	0.17 U	0.2 U	0.19 U
Total PCBs		2.206	2.518	0.770 U	0.890 U	0.860 U
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony		1.1 J	1.1 J	1.1 UJ	1.1 UJ	1.1 UJ
Arsenic	25,000	5	2.5	3.2	7.8 J	11 J
Barium	870,000	98 J	110 J	130 J	92 J	110 J
Beryllium	44,000	0.76	0.62	0.76	1.3	1.2
Cadmium	59,000	0.88	1.2	0.59	0.56 U	0.57 U
Chromium	690	10 J	13 J	7.8 J	17 J	18 J
Copper		41 J	60 J	18 J	25 J	26 J
Lead		140 J	150 J	61 J	58	17
Mercury	52,000	0.21	0.2	0.17	0.35	0.03 U
Nickel	440,000	13 J	12 J	6.9 J	29 J	28 J
Selenium		0.99 U	0.96 U	1.1 U	1.1 U	1.1 U
Silver		0.99 U	0.96 U	1.1 U	1.1 U	1.1 U
Thallium		1.4	1.3	1.4	1.8	1.9
Zinc		120 J	270 J	73 J	58 J	41 J
Total Cyanide		0.28 U	0.22 U	0.27 U	0.26 U	0.31 U

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	ind surface)/Conce	entration
	Screening	SB27-001	SB27-002	SB28-001	SB28-002	SB29-001
Compound/Analyte	Level (mg/kg)	5-7	10-12	2-3	5-7	3-5
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.046	0.035 U	0.093	0.048	0.055 U
Benzene	2.2	0.0084 U	0.0069 U	0.041	0.0076 U	0.011 U
Bromodichloromethane	3,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Bromoform	140	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Bromomethane	3.9	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
2-Butanone		0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Carbon Disulfide	9	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Carbon Tetrachloride	0.9	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chlorobenzene	1.3	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chloroethane +	94	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Chloroform	0.76	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chloromethane +	1.1	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Dibromochloromethane	1,300	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1-Dichloroethane	130	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,2-Dichloroethane	0.99	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1-Dichloroethene	300	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
cis-1,2-Dichloroethene	1,200	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
trans-1,2-Dichloroethene	3,100	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,2-Dichloropropane	0.5	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
cis-1,3-Dichloropropene	0.39	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
trans-1,3-Dichloropropene	0.39	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Ethylbenzene	58	0.0084 U	0.0069 U	0.059	0.0076 U	0.011 U
2-Hexanone +	0.72	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
4-Methyl-2-Pentanone		0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Methylene Chloride	34	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,2,2-Tetrachloroethane +	2,000	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Tetrachloroethene	28	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Toluene	42	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,1-Trichloroethane	1,200	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,2-Trichloroethane	1,800	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Trichloroethene	12	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Vinyl Chloride	1.1	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
m,p-Xylene*	320	0.0084 U	0.0069 U	0.012	0.0076 U	0.011 U
o-Xylene*	320	0.0084 U	0.0069 U	0.015	0.0076 U	0.011 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7)* The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration								
	Screening	SB27-001	SB27-002	SB28-001	SB28-002	SB29-001		
Compound/Analyte	Level (mg/kg)	5-7	10-12	2-3	5-7	3-5		
-		TCL Semivol	atiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Bis(2-chloroethyl)ether	0.66	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Bis(2-ethylhexyl)phthalate	31,000	0.38 U	0.38 U	0.45	0.4 U	0.39 U		
4-Bromophenyl phenyl ether		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Butyl benzyl phthalate	930	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Carbazole		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
4-Chloro-3-methylphenol		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
4-Chloroaniline		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
2-Chloronaphthalene		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
2-Chlorophenol	53,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
4-Chlorophenyl phenyl ether		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Dibenzofuran		0.38 U	0.38 U	0.5	0.4 U	0.39 U		
1,2-Dichlorobenzene	310	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
1,3-Dichlorobenzene +	570	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
1,4-Dichlorobenzene	340	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
3,3´-Dichlorobenzidine		0.76 U	0.76 U	0.78 U	0.79 U	0.78 U		
2,4-Dichlorophenol		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Diethyl phthalate	2,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Dimethyl phthalate +	1,300	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Di-n-butyl phthalate	2,300	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
2,4-Dimethylphenol		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
4,6-Dinitro-2-methylphenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U		
2,4-Dinitrophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U		
2,4-Dinitrotoluene		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
2,6-Dinitrotoluene		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Di-n-octyl phthalate	10,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Hexachlorobenzene	2.6	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Hexachlorobutadiene +	180	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Hexachlorocyclopentadiene	1.1	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Hexachloroethane		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Isophorone	4,600	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
2-Methylnaphthalene		0.38 U	0.38 U	1.1	0.4 U	0.39 U		
2-Methylphenol		0.38 U 0.38 U	0.38 U 0.38 U	0.39 U 0.39 U	0.4 U 0.4 U	0.39 U 0.39 U		
4-Methylphenol 2-Nitroaniline +	7.5	0.38 U 1.8 U	0.38 U 1.9 U	0.39 U 1.9 U	0.4 U 1.9 U	0.39 U 1.9 U		
2-Nitroaniline + 3-Nitroaniline	7.5	1.8 U	1.9 U 1.9 U	1.9 U	1.9 U 1.9 U	1.9 U		
4-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U		
Nitrobenzene	9.4	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
2-Nitrophenol	9.4	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U		
4-Nitrophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U		
N-Nitrosodi-n-propylamine		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
N-Nitrosodi-n-propytamine N-Nitrosodiphenylamine		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
2, 2'-Oxybis(1-Chloropropane)		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
Pentachlorophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U		
Phenol		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
1,2,4-Trichlorobenzene	920	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
2,4,5-Trichlorophenol		0.76 U	0.76 U	0.78 U	0.79 U	0.78 U		
2,4,6-Trichlorophenol	540	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U		
NOTES:	2.0	0.50 0	0.50 0	0.57 0	0.10	0.57 0		

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SB27-001	SB27-002	SB28-001	SB28-002	SB29-001		
Compound/Analyte	Level (mg/kg)	5-7	10-12	2-3	5-7	3-5		
•	<u> </u>	PAHs (mg/kg)		•			
Acenaphthene		0.029 U	0.029 U	1.7	0.03 U	0.035		
Acenaphthylene		0.029 U	0.029 U	1.4	0.03 U	0.029 U		
Anthracene		0.029 U	0.029 U	3.5	0.03 U	0.038		
Benzo(a)anthracene		0.029 U	0.029 U	1.1	0.03 U	0.029 U		
Benzo(b)fluoranthene		0.029 U	0.029 U	1.8	0.03 U	0.029 U		
Benzo(k)fluoranthene		0.029 U	0.029 U	1.9	0.03 U	0.029 U		
Benzo(g,h,i)perylene		0.029 U	0.029 U	3	0.03 U	0.029 U		
Benzo(a)pyrene		0.029 U	0.029 U	2.6	0.03 U	0.029 U		
Chrysene		0.029 U	0.029 U	3.8	0.03 U	0.052		
Dibenzo(a,h)anthracene		0.029 U	0.029 U	0.89	0.03 U	0.029 U		
Fluoranthene		0.029 U	0.029 U	0.051	0.03 U	0.029		
Fluorene		0.029 U	0.029 U	1.1	0.03 U	0.033		
Indeno(1,2,3-cd)pyrene		0.029 U	0.029 U	1.9	0.03 U	0.029 U		
Naphthalene	1.8	0.029 U	0.029 U	1.4	0.03 U	0.094		
Phenanthrene		0.031	0.047	0.038	0.03 U	0.14		
Pyrene		0.029 U	0.029 U	0.097	0.03 U	0.044		
		PCBs (U 0					
Aroclor 1016		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U		
Aroclor 1221		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U		
Aroclor 1232		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U		
Aroclor 1242		0.094 U	0.093 U	0.34	0.14	0.094 U		
Aroclor 1248		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U		
Aroclor 1254		0.19 U	0.19 U	0.2	0.19 U	0.19 U		
Aroclor 1260		0.19 U	0.19 U	0.19 U	0.19 U	0.19 U		
Total PCBs		0.850 U	0.845 U	1.102	0.904	0.850 U		
	Priority	Pollutant Metals a	•	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
Antimony		1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ		
Arsenic	25,000	7.1 J	7 J	6.1	9.2 J	11 J		
Barium	870,000	32 J	39 J	67 J	41 J	41 J		
Beryllium	44,000	0.53 U	0.55 U	0.55 U	0.57 U	0.57 U		
Cadmium	59,000	0.53 U	0.55 U	0.71	0.57 U	0.57 U		
Chromium	690	16 J	17 J	14 J	18 J	18 J		
Copper		39 J	29 J	42 J	27 J	30 J		
Lead		20	19	120 J	31	23		
Mercury	52,000	0.028 U	0.028 U	0.53	0.049	0.031		
Nickel	440,000	31 J	30 J	20 J	33 J	38 J		
Selenium		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U		
Silver		12	1.1 U	1.1 U	1.1 U	1.1 U		
Thallium		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U		
Zinc		50 J	42 J	150 J	61 J	46 J		
Total Cyanide		0.28 U	0.27 U	0.29 U	0.3 U	0.28 U		

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- $(7)\ Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	ind surface)/Conce	entration
	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002
Compound/Analyte	Level (mg/kg)	12-14	2-3	6-8	2-3	3-5
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.067 U	0.03	0.064 U	0.067 U	0.081 U
Benzene	2.2	0.013 U	0.024	0.013 U	5.2	0.77
Bromodichloromethane	3,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Bromoform	140	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Bromomethane	3.9	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
2-Butanone		0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Carbon Disulfide	9	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Carbon Tetrachloride	0.9	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chlorobenzene	1.3	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chloroethane +	94	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Chloroform	0.76	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chloromethane +	1.1	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Dibromochloromethane	1,300	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1-Dichloroethane	130	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,2-Dichloroethane	0.99	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1-Dichloroethene	300	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
cis-1,2-Dichloroethene	1,200	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
trans-1,2-Dichloroethene	3,100	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,2-Dichloropropane	0.5	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
cis-1,3-Dichloropropene	0.39	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
trans-1,3-Dichloropropene	0.39	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Ethylbenzene	58	0.013 U	0.038	0.013 U	1.5	2
2-Hexanone +	0.72	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
4-Methyl-2-Pentanone		0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Methylene Chloride	34	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1,2,2-Tetrachloroethane +	2,000	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Tetrachloroethene	28	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Toluene	42	0.013 U	0.032	0.013 U	0.77	0.016 U
1,1,1-Trichloroethane	1,200	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1,2-Trichloroethane	1,800	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Trichloroethene	12	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Vinyl Chloride	1.1	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
m,p-Xylene*	320	0.013 U	0.047	0.013 U	0.62	0.057
o-Xylene*	320	0.013 U	0.029	0.013 U	0.47	0.034
Xylenes, Total	320	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) Shaded value exceeds Tier 1 screening level.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

- (7) NA Not analyzed.
 (8) * The "total xylenes" screening level was used because it is more conservative.
 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Tier 1						
G	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002	
Compound/Analyte	Level (mg/kg)	12-14	2-3	6-8	2-3	3-5	
5: (2.11	п		atiles (mg/kg)	0.25.11	0.22.11	0.20.11	
Bis(2-chloroethoxy)methane		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Bis(2-chloroethyl)ether	0.66	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	0.33 U	0.37 U	0.99	0.87	
4-Bromophenyl phenyl ether		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Butyl benzyl phthalate	930	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Carbazole		0.39 U	0.33 U	0.37 U	0.46	1.3	
4-Chloro-3-methylphenol		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
4-Chloroaniline		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2-Chloronaphthalene		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2-Chlorophenol	53,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
4-Chlorophenyl phenyl ether		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Dibenzofuran		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
1,2-Dichlorobenzene	310	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
1,3-Dichlorobenzene +	570	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
1,4-Dichlorobenzene	340	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
3,3´-Dichlorobenzidine		0.78 U	0.33 U	0.74 U	0.66 U	0.78 U	
2,4-Dichlorophenol		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Diethyl phthalate	2,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Dimethyl phthalate +	1,300	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Di-n-butyl phthalate	2,300	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2,4-Dimethylphenol		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
4,6-Dinitro-2-methylphenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
2,4-Dinitrophenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
2,4-Dinitrotoluene		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2,6-Dinitrotoluene		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Di-n-octyl phthalate	10,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Hexachlorobenzene	2.6	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Hexachlorobutadiene +	180	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Hexachlorocyclopentadiene	1.1	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Hexachloroethane		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
Isophorone	4,600	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2-Methylnaphthalene		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2-Methylphenol		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
4-Methylphenol		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2-Nitroaniline +	7.5	1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
3-Nitroaniline		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
4-Nitroaniline		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
Nitrobenzene	9.4	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2-Nitrophenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
4-Nitrophenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
N-Nitrosodi-n-propylamine		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
N-Nitrosodiphenylamine		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2, 2'-Oxybis(1-Chloropropane)		0.39 U	0.33 U	0.016 U	0.014 U	0.017 U	
Pentachlorophenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U	
Phenol		0.39 U	15	0.37 U	0.33 U	0.39 U	
1,2,4-Trichlorobenzene	920	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	
2,4,5-Trichlorophenol		0.78 U	0.66 U	0.74 U	0.66 U	0.78 U	
2,4,6-Trichlorophenol	540	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U	

⁽¹⁾ mg/kg - milligrams per kilogram.

 $[\]eqno(2) TCL - Target compound \ list.$

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued)

Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dept		nd surface)/Conce	
	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002
Compound/Analyte	Level (mg/kg)	12-14	2-3	6-8	2-3	3-5
		PAHs (mg/kg)			
Acenaphthene		0.029 U	0.44	0.028 U	0.8	0.84
Acenaphthylene		0.029 U	0.13 U	0.029	1.2	0.99
Anthracene		0.029 U	0.7	0.047	1.5	0.98
Benzo(a)anthracene		0.029 U	0.2	0.028 U	2.7	1.8
Benzo(b)fluoranthene		0.029 U	0.84	0.028 U	1.2	0.87
Benzo(k)fluoranthene		0.029 U	0.48	0.028 U	0.76	0.75
Benzo(g,h,i)perylene		0.029 U	1.5	0.028 U	0.61	0.38
Benzo(a)pyrene		0.029 U	0.91	0.028 U	1.7	1.1
Chrysene		0.029 U	1.5	0.075	2.5	1.7
Dibenzo(a,h)anthracene		0.029 U	0.13 U	0.028 U	0.25 U	0.3 U
Fluoranthene		0.029 U	0.67	0.075	3.4	2.8
Fluorene		0.029 U	0.53	0.03	1	0.87
Indeno(1,2,3-cd)pyrene		0.029 U	1.1	0.028 U	0.56	0.34
Naphthalene	1.8	0.029 U	0.68	0.11	0.25 U	2.1
Phenanthrene		0.036	2	0.17	3.8	3.7
Pyrene		0.029 U	1.1	0.13	4.6	4
		PCBs (mg/kg)			
Aroclor 1016		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1221		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1232		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1242		0.095 U	3.7	0.093 U	1.3	0.15
Aroclor 1248		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1254		0.19 U	1.8	0.19 U	1.1	0.19 U
Aroclor 1260		0.19 U	0.17 U	0.19 U	0.17 U	0.19 U
Total PCBs		0.855 U	6.002	0.845 U	2.910	0.902
	Priority	Pollutant Metals a	nd Total Cyanide	(mg/kg)		
Antimony		1.1 UJ	1 UJ	1.1 UJ	1.1 J	1.1 J
Arsenic	25,000	7.2 J	5	12 J	4.8	3.4 J
Barium	870,000	38 J	43 J	31 J	110 J	80 J
Beryllium	44,000	0.55 U	0.62	0.93	1	0.9
Cadmium	59,000	0.55 U	1.2	0.55 U	1.2	0.7
Chromium	690	17 J	16 J	19 J	29 J	13 J
Copper		27 J	33 J	29 J	91 J	35 J
Lead		18	120 J	18	190 J	65
Mercury	52,000	0.032	0.25	0.037	0.21	0.052
Nickel	440,000	32 J	18 J	31 J	18 J	11 J
Selenium		1.1 U	1 U	1.1 U	0.98 U	1.1 U
Silver		1.1 U	1 U	1.1 U	0.98 U	1.1 U
Thallium		1.1 U	1 U	1.2	1.3	1.5
Zinc		50 J	200 J	45 J	260 J	88 J
Total Cyanide		0.29 U	0.24 U	0.27 U	0.25 U	0.27 U

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	ind surface)/Conce	entration
	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7
	·	TCL Volat	iles (mg/kg)			
Acetone	100,000	0.042 U	0.12	0.064 U	0.041 U	0.14
Benzene	2.2	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromodichloromethane	3,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromoform	140	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromomethane	3.9	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
2-Butanone		0.017 U	0.027	0.026 U	0.017 U	0.024 U
Carbon Disulfide	9	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Carbon Tetrachloride	0.9	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chlorobenzene	1.3	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chloroethane +	94	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Chloroform	0.76	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chloromethane +	1.1	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Dibromochloromethane	1,300	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1-Dichloroethane	130	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,2-Dichloroethane	0.99	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1-Dichloroethene	300	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
cis-1,2-Dichloroethene	1,200	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
trans-1,2-Dichloroethene	3,100	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,2-Dichloropropane	0.5	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
cis-1,3-Dichloropropene	0.39	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
trans-1,3-Dichloropropene	0.39	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Ethylbenzene	58	0.01	0.012 U	0.013 U	0.015	0.012 U
2-Hexanone +	0.72	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
4-Methyl-2-Pentanone		0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Methylene Chloride	34	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1,2,2-Tetrachloroethane +	2,000	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Tetrachloroethene	28	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Toluene	42	0.0084 U	0.012 U	0.013 U	0.013	0.012 U
1,1,1-Trichloroethane	1,200	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1,2-Trichloroethane	1,800	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Trichloroethene	12	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Vinyl Chloride	1.1	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
m,p-Xylene*	320	0.0084 U	0.012 U	0.013 U	0.043	0.012 U
o-Xylene*	320	0.0084 U	0.025	0.013 U	0.033	0.012 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7)* The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002			
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7			
		TCL Semivo	latiles (mg/kg)						
Bis(2-chloroethoxy)methane		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
Bis(2-chloroethyl)ether **	0.66	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
Bis(2-ethylhexyl)phthalate	31,000	2 U	0.4 U	0.39 U	2	0.4 U			
4-Bromophenyl phenyl ether		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
Butyl benzyl phthalate	930	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
Carbazole		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
1-Chloro-3-methylphenol		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
4-Chloroaniline		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
2-Chloronaphthalene		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
2-Chlorophenol	53,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
4-Chlorophenyl phenyl ether		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
Dibenzofuran		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
1,2-Dichlorobenzene	310	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
1,3-Dichlorobenzene +	570	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
,4-Dichlorobenzene	340	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
3,3´-Dichlorobenzidine		4.1 U	0.81 U	0.79 U	3.5 U	0.8 U			
2,4-Dichlorophenol		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
Diethyl phthalate	2,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
Dimethyl phthalate +	1,300	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
Di-n-butyl phthalate	2,300	6.3	0.4 U	0.39 U	1.8 U	0.4 U			
2,4-Dimethylphenol		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
4,6-Dinitro-2-methylphenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U			
2,4-Dinitrophenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U			
2,4-Dinitrotoluene		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
2,6-Dinitrotoluene		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
Di-n-octyl phthalate	10,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
Hexachlorobenzene	2.6	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
Hexachlorobutadiene +	180	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
Hexachlorocyclopentadiene **	1.1	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
Hexachloroethane		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
Isophorone	4,600	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
2-Methylnaphthalene		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
2-Methylphenol		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
4-Methylphenol		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
2-Nitroaniline + **	7.5	9.9 U	2 U	1.9 U	8.6 U	1.9 U			
3-Nitroaniline		9.9 U	2 U	1.9 U	8.6 U	1.9 U			
1-Nitroaniline		9.9 U	2 U	1.9 U	8.6 U	1.9 U			
Vitrobenzene	9.4	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
2-Nitrophenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U			
l-Nitrophenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U			
N-Nitrosodi-n-propylamine		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
N-Nitrosodiphenylamine		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
2, 2'-Oxybis(1-Chloropropane)		0.087 U	0.017 U	0.017 U	0.075 U	0.017 U			
Pentachlorophenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U			
Phenol		2 U	0.4 U	0.39 U	1.8 U	0.4 U			
,2,4-Trichlorobenzene	920	2 U	0.4 U	0.39 U	1.8 U	0.4 U			
2,4,5-Trichlorophenol		4.1 U	0.81 U	0.79 U	3.5 U	0.8 U			
2,4,6-Trichlorophenol	540	2 U	0.4 U	0.39 U	1.8 U	0.4 U			

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(6) **} Several values exceeded non-TACO or TACO screening levels but were consistently non-detect so no values were shaded.

(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued)

Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002		
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7		
		PAHs ((mg/kg)	·				
Acenaphthene		1.5 U	0.031 U	0.03 U	0.13 U	0.12		
Acenaphthylene		1.6	0.031 U	0.03 U	0.19	0.086		
Anthracene		1.8	0.031 U	0.03 U	0.36	0.17		
Benzo(a)anthracene		2.8	0.031 U	0.03 U	0.13 U	0.094		
Benzo(b)fluoranthene		1.7	0.031 U	0.03 U	0.24	0.13		
Benzo(k)fluoranthene		1.5 U	0.031 U	0.03 U	0.24	0.14		
Benzo(g,h,i)perylene		1.5 U	0.031 U	0.03 U	0.57	0.36		
Benzo(a)pyrene		1.8	0.031 U	0.03 U	0.13	0.14		
Chrysene		3.2	0.031 U	0.041	0.75	0.39		
Dibenzo(a,h)anthracene		1.5 U	0.031 U	0.03 U	0.13 U	0.11		
Fluoranthene		3.7	0.031 U	0.039	0.21	0.33		
Fluorene		1.5 U	0.031 U	0.03 U	0.13 U	0.31		
Indeno(1,2,3-cd)pyrene		1.5 U	0.031 U	0.03 U	0.29	0.24		
Naphthalene	1.8	2.1	0.14	0.042	0.38	0.03 U		
Phenanthrene		4.1	0.076	0.083	1.3	0.13		
Pyrene		5.5	0.047	0.033	0.36	1.2		
		PCBs ((mg/kg)					
Aroclor 1016		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U		
Aroclor 1221		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U		
Aroclor 1232		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U		
Aroclor 1242		2.5	0.096 U	0.094 U	0.87 U	0.098 U		
Aroclor 1248		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U		
Aroclor 1254		2.2	0.19 U	0.19 U	1.7 U	0.2 U		
Aroclor 1260		0.18 U	0.19 U	0.19 U	1.7 U	0.2 U		
Total PCBs		5.232	0.860 U	0.850 U	7.750 U	0.890 U		
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)				
Antimony		1.1 UJ	1.1 UJ	1.1 UJ	1 UJ	1.2 UJ		
Arsenic	25,000	5.9	5.1 J	17 J	1.2	7.5 J		
Barium	870,000	100 J	97 J	63 J	59 J	100 J		
Beryllium	44,000	0.86	1.2	1	0.57	1.3		
Cadmium	59,000	0.59	0.59	0.54 U	0.54	0.59 U		
Chromium	690	11 J	17 J	16 J	5.1 J	21 J		
Copper		43 J	31 J	55 J	6.8 J	28 J		
Lead		140 J	17	30	25 J	19		
Mercury	52,000	0.28	0.046	0.023 U	0.026 U	0.031 U		
Nickel	440,000	12 J	26 J	30 J	7.4 J	33 J		
Selenium		1.1 U	1.1 U	1.1 U	1 U	1.2 U		
Silver		1.1 U	1.1 U	1.1 U	1 U	1.2 U		
Thallium		1.5	1.9	2	1.3	2.1		
Zinc		69 J	54 J	43 J	29 J	53 J		
Total Cyanide		0.29 U	0.34 U	0.29 U	0.27 U	0.31 U		

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.14	0.13	0.042 U	0.044 U	0.082
Benzene	2.2	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromodichloromethane	3,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromoform	140	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromomethane	3.9	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
2-Butanone		0.015	0.027	0.017 U	0.018 U	0.02 U
Carbon Disulfide	9	0.013	0.012 U	0.0084 U	0.0088 U	0.0099 U
Carbon Tetrachloride	0.9	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chlorobenzene	1.3	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chloroethane +	94	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Chloroform	0.76	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chloromethane +	1.1	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Dibromochloromethane	1,300	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1-Dichloroethane	130	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,2-Dichloroethane	0.99	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1-Dichloroethene	300	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
cis-1,2-Dichloroethene	1,200	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
trans-1,2-Dichloroethene	3,100	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,2-Dichloropropane	0.5	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
cis-1,3-Dichloropropene	0.39	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
trans-1,3-Dichloropropene	0.39	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Ethylbenzene	58	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
2-Hexanone +	0.72	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
4-Methyl-2-Pentanone		0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Methylene Chloride	34	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,2,2-Tetrachloroethane +	2,000	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Tetrachloroethene	28	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Toluene	42	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,1-Trichloroethane	1,200	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,2-Trichloroethane	1,800	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Trichloroethene	12	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Vinyl Chloride	1.1	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
m,p-Xylene*	320	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
o-Xylene*	320	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7)* The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002	
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9	
	. (2.3/1	TCL Semivol	atiles (mg/kg)	<u> </u>	_		
Bis(2-chloroethoxy)methane		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Bis(2-chloroethyl)ether	0.66	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Bis(2-ethylhexyl)phthalate	31,000	5.6	0.39 U	0.39 U	0.42 U	0.39 U	
4-Bromophenyl phenyl ether		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Butyl benzyl phthalate	930	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Carbazole		0.47	0.39 U	0.39 U	0.67	0.39 U	
4-Chloro-3-methylphenol		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
4-Chloroaniline		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Chloronaphthalene		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Chlorophenol	53,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
4-Chlorophenyl phenyl ether		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Dibenzofuran		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
1,2-Dichlorobenzene	310	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
1,3-Dichlorobenzene +	570	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
1,4-Dichlorobenzene	340	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
3,3´-Dichlorobenzidine		0.71 U	0.79 U	0.77 U	0.85 U	0.77 U	
2,4-Dichlorophenol		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Diethyl phthalate	2,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Dimethyl phthalate +	1,300	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Di-n-butyl phthalate	2,300	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2,4-Dimethylphenol		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
4,6-Dinitro-2-methylphenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
2,4-Dinitrophenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
2,4-Dinitrotoluene		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2,6-Dinitrotoluene		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Di-n-octyl phthalate	10,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Hexachlorobenzene	2.6	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Hexachlorobutadiene +	180	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Hexachlorocyclopentadiene	1.1	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Hexachloroethane		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
Isophorone	4,600	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Methylnaphthalene		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Methylphenol		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
4-Methylphenol		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Nitroaniline +	7.5	1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
3-Nitroaniline		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
4-Nitroaniline		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
Nitrobenzene	9.4	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2-Nitrophenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
4-Nitrophenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
N-Nitrosodi-n-propylamine		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
N-Nitrosodiphenylamine		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2, 2'-Oxybis(1-Chloropropane)		0.015 U	0.017 U	0.016 U	0.018 U	0.016 U	
Pentachlorophenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U	
Phenol		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
1,2,4-Trichlorobenzene	920	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	
2,4,5-Trichlorophenol		0.71 U	0.79 U	0.77 U	0.85 U	0.77 U	
2,4,6-Trichlorophenol	540	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U	

⁽¹⁾ mg/kg - milligrams per kilogram.

 $[\]eqno(2) TCL - Target compound \ list.$

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002			
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9			
		PAHs ((mg/kg)						
Acenaphthene		0.11	0.03 U	0.029 U	0.13	0.029 U			
Acenaphthylene		0.082	0.03 U	0.029 U	0.074	0.029 U			
Anthracene		0.15	0.03 U	0.029 U	0.33	0.029 U			
Benzo(a)anthracene		0.19	0.064	0.029 U	0.17	0.029 U			
Benzo(b)fluoranthene		0.47	0.041	0.029 U	0.38	0.029 U			
Benzo(k)fluoranthene		0.53	0.056	0.029 U	0.87	0.029 U			
Benzo(g,h,i)perylene		0.57	0.037	0.029 U	0.35	0.029 U			
Benzo(a)pyrene		0.33	0.072	0.029 U	0.32	0.029 U			
Chrysene		0.71	0.066	0.029 U	1.1	0.029 U			
Dibenzo(a,h)anthracene		0.076	0.03 U	0.029 U	0.19	0.029 U			
Fluoranthene		0.55	0.074	0.029 U	2	0.029 U			
Fluorene		0.086	0.03 U	0.029 U	0.12	0.029 U			
Indeno(1,2,3-cd)pyrene		0.18	0.036	0.029 U	0.36	0.029 U			
Naphthalene	1.8	0.16	0.03 U	0.029 U	0.18	0.056			
Phenanthrene		0.7	0.03 U	0.029 U	1	0.029 U			
Pyrene		0.63	0.074	0.029 U	2.1	0.029 U			
		PCBs ((mg/kg)						
Aroclor 1016		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U			
Aroclor 1221		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U			
Aroclor 1232		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U			
Aroclor 1242		8.5	0.095 U	0.095 U	0.1 U	0.092 U			
Aroclor 1248		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U			
Aroclor 1254		6	0.19 U	0.19 U	0.2 U	0.18 U			
Aroclor 1260		0.17 U	0.19 U	0.19 U	0.2 U	0.18 U			
Total PCBs		15.014	0.855 U	0.855 U	0.900 U	0.820 U			
	Priority		and Total Cyanide	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					
Antimony		6.5 J	1.1 UJ	1.1 UJ	1.2 UJ	0.97 UJ			
Arsenic	25,000	20	5.8 J	12 J	7.2	15 J			
Barium	870,000	520 J	98 J	89 J	120 J	98 J			
Beryllium	44,000	1.4	0.83	1.1	1.1	1.2			
Cadmium	59,000	8.1	0.56 U	0.56 U	0.72	0.53			
Chromium	690	320 J	11 J	20 J	19 J	20 J			
Copper		480 J	11 J	30 J	28 J	38 J			
Lead		1400 J	36	25	61 J	22			
Mercury	52,000	2.6	0.14	0.024 U	0.33	0.026 U			
Nickel	440,000	210 J	12 J	35 J	26 J	38 J			
Selenium		0.99 U	1.1 U	1.1 U	1.2 U	0.97 U			
Silver		1	1.1 U	1.1 U	1.2 U	0.97 U			
Thallium		1.3	2	2.2	2	2			
Zinc		1600 J	40 J	49 J	73 J	46 J			
Total Cyanide		0.28 U	0.29 U	0.24 U	0.35 U	0.25 U			

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- $(7)\ Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	h (feet below grou	ind surface)/Conce	ntration
	Screening	SP37-003	SB38-001	SP39-001	SP39-002	SP39-003
Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.066 J	0.12 J	0.036 U	0.11	0.047 U
Benzene	2.2	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromodichloromethane	3,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromoform	140	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromomethane	3.9	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
2-Butanone		0.023 U	0.029 UJ	0.014 U	0.027	0.019 U
Carbon Disulfide	9	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Carbon Tetrachloride	0.9	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chlorobenzene	1.3	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chloroethane +	94	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Chloroform	0.76	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chloromethane +	1.1	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Dibromochloromethane	1,300	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1-Dichloroethane	130	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,2-Dichloroethane	0.99	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1-Dichloroethene	300	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
cis-1,2-Dichloroethene	1,200	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
trans-1,2-Dichloroethene	3,100	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,2-Dichloropropane	0.5	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
cis-1,3-Dichloropropene	0.39	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
trans-1,3-Dichloropropene	0.39	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Ethylbenzene	58	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
2-Hexanone +	0.72	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
4-Methyl-2-Pentanone		0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Methylene Chloride	34	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1,2,2-Tetrachloroethane +	2,000	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Tetrachloroethene	28	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Toluene	42	0.012 U	0.014 UJ	0.008	0.013 U	0.0094 U
1,1,1-Trichloroethane	1,200	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1,2-Trichloroethane	1,800	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Trichloroethene	12	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Vinyl Chloride	1.1	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
m,p-Xylene*	320	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
o-Xylene*	320	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) J Indicates an estimated value.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

- (7) NA Not analyzed.
 (8) * The "total xylenes" screening level was used because it is more conservative.
 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SP37-003	SB38-001	SP39-001	SP39-002	SP39-003		
Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11		
	(*** <u>8</u> , ** <u>8</u> /		latiles (mg/kg)					
Bis(2-chloroethoxy)methane	I	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
Bis(2-chloroethyl)ether **	0.66	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
Bis(2-ethylhexyl)phthalate	31.000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
4-Bromophenyl phenyl ether		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
Butyl benzyl phthalate	930	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
Carbazole		0.38 U	0.53	1.7 U	0.4 U	0.38 U		
4-Chloro-3-methylphenol		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
4-Chloroaniline		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
2-Chloronaphthalene		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
2-Chlorophenol	53,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
4-Chlorophenyl phenyl ether		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
Dibenzofuran		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
1,2-Dichlorobenzene	310	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
1,3-Dichlorobenzene +	570	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
1,4-Dichlorobenzene	340	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
3,3´-Dichlorobenzidine		0.75 U	0.42 U	3.5 U	0.4 U	0.38 U		
2,4-Dichlorophenol		0.73 U	0.42 U	1.7 U	0.4 U	0.38 U		
Diethyl phthalate	2,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
Dimethyl phthalate +	1,300	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
Di-n-butyl phthalate	2,300	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
2,4-Dimethylphenol	-,500	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
4,6-Dinitro-2-methylphenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U		
2,4-Dinitrophenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U		
2,4-Dinitrophenol		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
2,6-Dinitrotoluene		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
Di-n-octyl phthalate	10,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
Hexachlorobenzene	2.6	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
Hexachlorobutadiene +	180	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
Hexachlorocyclopentadiene **	1.1	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
Hexachloroethane		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
Isophorone	4,600	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
2-Methylnaphthalene		0.38 U	1.7	1.7 U	0.4 U	0.38 U		
2-Methylphenol		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
4-Methylphenol		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
2-Nitroaniline + **	7.5	1.8 U	2 U	8.4 U	1.9 U	1.9 U		
3-Nitroaniline		1.8 U	2 U	8.4 U	1.9 U	1.9 U		
4-Nitroaniline		1.8 U	2 U	8.4 U	1.9 U	1.9 U		
Nitrobenzene	9.4	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
2-Nitrophenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U		
4-Nitrophenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U		
N-Nitrosodi-n-propylamine		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
N-Nitrosodiphenylamine		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.018 U	0.074 U	0.017 U	0.016 U		
Pentachlorophenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U		
Phenol		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
1,2,4-Trichlorobenzene	920	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		
2,4,5-Trichlorophenol		0.75 U	0.83 U	3.5 U	0.8 U	0.77 U		
2,4,6-Trichlorophenol	540	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U		

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

^{(6) **} Several values exceeded non-TACO or TACO screening levels but were consistently non-detect so no values were shaded.

(7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued)

Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample 1	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SP37-003	SB38-001	SP39-001	SP39-002	SP39-003			
Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11			
-		PAHs ((mg/kg)						
Acenaphthene		0.028 U	0.42	1.3 U	0.056	0.029 U			
Acenaphthylene		0.028 U	0.37	1.3 U	0.03 U	0.029 U			
Anthracene		0.028 U	1.7	1.3 U	0.29	0.03			
Benzo(a)anthracene		0.028 U	1.9	1.3 U	0.13	0.029 U			
Benzo(b)fluoranthene		0.028 U	1.1	1.3 U	0.58	0.029 U			
Benzo(k)fluoranthene		0.028 U	0.96	1.3 U	0.65	0.029 U			
Benzo(g,h,i)perylene		0.028 U	0.46	1.3 U	0.31	0.029 U			
Benzo(a)pyrene		0.028 U	0.89	1.3 U	0.64	0.029 U			
Chrysene		0.028 U	2.3	1.3 U	1.1	0.056			
Dibenzo(a,h)anthracene		0.028 U	0.15	1.3 U	0.23	0.029 U			
Fluoranthene		0.028 U	4.1	1.3 U	1.6	0.081			
Fluorene		0.028 U	0.7	1.3 U	0.056	0.029 U			
Indeno(1,2,3-cd)pyrene		0.028 U	0.38	1.3 U	0.3 U	0.029 U			
Naphthalene	1.8	0.028 U	2	1.3 U	0.032	0.029 U			
Phenanthrene		0.028 U	5.7	1.3	0.81	0.071			
Pyrene		0.028 U	4.7	2	1.7	0.076			
		PCBs (mg/kg)						
Aroclor 1016		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U			
Aroclor 1221		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U			
Aroclor 1232		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U			
Aroclor 1242		0.092 U	0.1 U	0.087 U	0.1 U	0.14			
Aroclor 1248		0.092 U	0.1 U	0.087 U	0.1 U	0.095 U			
Aroclor 1254		0.18 U	0.2 U	0.17 U	0.2 U	0.19 U			
Aroclor 1260		0.18 U	0.2 U	0.17 U	0.2 U	0.19 U			
Total PCBs		0.820 U	0.900 U	0.775 U	0.900 U	0.900			
	Priority		and Total Cyanide	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					
Antimony		1.2 UJ	1.3 UJ	1.1 UJ	6 J	1 UJ			
Arsenic	25,000	7.7 J	7.7 J	1.7	10 J	8.1 J			
Barium	870,000	85 J	49 J	57 J	140 J	83 J			
Beryllium	44,000	1.1	1.1	0.59	1.1	1.1			
Cadmium	59,000	0.59 U	0.69	0.95	1	0.51 U			
Chromium	690	19 J	22 J	5.6 J	11 J	19 J			
Copper		25 J	33 J	9.1 J	59 J	30 J			
Lead		17	40	23 J	970	19			
Mercury	52,000	0.029 U	0.051	0.025 U	6.2	0.027			
Nickel	440,000	25 J	28 J	8.8 J	13 J	29 J			
Selenium		1.2 U	1.3 U	1.1 U	1.1 U	1 U			
Silver		1.2 U	1.3 U	1.1 U	1.1 U	1 U			
Thallium		1.8	1.5	1.4	1.6	1.9			
Zinc		37 J	88 J	33 J	200 J	40 J			
Total Cyanide		0.31 U	0.33 U	0.28 U	0.31 U	0.3 U			

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	nd surface)/Conce	ntration
	Screening	SP40-002	SP40-003	SP43-001	SP43-002	SP43-003
Compound/Analyte	Level (mg/kg)	7-8	14-15	2-3	3.5-4.5	11-12
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.071	0.043 U	0.15	0.063 U	0.041 U
Benzene	2.2	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromodichloromethane	3,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromoform	140	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromomethane	3.9	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
2-Butanone		0.02 U	0.017 U	0.031	0.025 U	0.017 U
Carbon Disulfide	9	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Carbon Tetrachloride	0.9	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chlorobenzene	1.3	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chloroethane +	94	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Chloroform	0.76	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chloromethane +	1.1	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Dibromochloromethane	1,300	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1-Dichloroethane	130	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,2-Dichloroethane	0.99	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1-Dichloroethene	300	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
cis-1,2-Dichloroethene	1,200	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
trans-1,2-Dichloroethene	3,100	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,2-Dichloropropane	0.5	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
cis-1,3-Dichloropropene	0.39	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
trans-1,3-Dichloropropene	0.39	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Ethylbenzene	58	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
2-Hexanone +	0.72	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
4-Methyl-2-Pentanone		0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Methylene Chloride	34	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	NA
Styrene	430	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,2,2-Tetrachloroethane +	2,000	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Tetrachloroethene	28	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Toluene	42	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,1-Trichloroethane	1,200	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,2-Trichloroethane	1,800	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Trichloroethene	12	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Vinyl Chloride	1.1	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
m,p-Xylene*	320	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
o-Xylene*	320	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Xylenes, Total	320	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7)* The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SP40-002	SP40-003	SP43-001	SP43-002	SP43-003		
Compound/Analyte	Level (mg/kg)	7-8	14-15	2-3	3.5-4.5	11-12		
		TCL Semivol	atiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
Bis(2-chloroethyl)ether	0.66	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
4-Bromophenyl phenyl ether		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
Butyl benzyl phthalate	930	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
Carbazole		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
4-Chloro-3-methylphenol		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
4-Chloroaniline		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
2-Chloronaphthalene		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
2-Chlorophenol	53,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
4-Chlorophenyl phenyl ether		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
Dibenzofuran		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
1,2-Dichlorobenzene	310	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
1,3-Dichlorobenzene +	570	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
1,4-Dichlorobenzene	340	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
3,3´-Dichlorobenzidine		0.77 U	0.77 U	0.85 U	0.78 U	0.78 U		
2,4-Dichlorophenol		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
Diethyl phthalate	2,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
Dimethyl phthalate +	1,300	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
Di-n-butyl phthalate	2,300	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
2,4-Dimethylphenol		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
4,6-Dinitro-2-methylphenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U		
2,4-Dinitrophenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U		
2,4-Dinitrotoluene		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
2,6-Dinitrotoluene		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
Di-n-octyl phthalate	10,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
Hexachlorobenzene	2.6	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
Hexachlorobutadiene +	180	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
Hexachlorocyclopentadiene	1.1	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
Hexachloroethane		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
Isophorone	4,600	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
2-Methylnaphthalene		0.39 U	0.39 U	0.43 U	1.6	0.39 U		
2-Methylphenol		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
4-Methylphenol		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
2-Nitroaniline +	7.5	1.9 U	1.9 U	2.1 U	1.9 U	1.9 U		
3-Nitroaniline		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U		
4-Nitroaniline		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U		
Nitrobenzene	9.4	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
2-Nitrophenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U		
4-Nitrophenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U		
N-Nitrosodi-n-propylamine		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
N-Nitrosodiphenylamine		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.018 U	0.016 U	0.016 U		
Pentachlorophenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U		
Phenol		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
1,2,4-Trichlorobenzene	920	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		
2,4,5-Trichlorophenol		0.77 U	0.77 U	0.85 U	0.78 U	0.78 U		
2,4,6-Trichlorophenol	540	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U		

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SP40-002	SP40-003	SP43-001	SP43-002	SP43-003			
Compound/Analyte	Level (mg/kg)	7-8	14-15	2-3	3.5-4.5	11-12			
	1 0 0/1	PAHs ((mg/kg)						
Acenaphthene		0.029 U	0.029 U	0.072	0.062	0.029 U			
Acenaphthylene		0.029 U	0.029 U	0.17	0.074	0.029 U			
Anthracene		0.029 U	0.029 U	0.032 U	0.029	0.029 U			
Benzo(a)anthracene		0.029 U	0.029 U	0.045	0.09	0.029 U			
Benzo(b)fluoranthene		0.029 U	0.029 U	0.12	0.13	0.029 U			
Benzo(k)fluoranthene		0.029 U	0.029 U	0.098	0.11	0.029 U			
Benzo(g,h,i)perylene		0.029 U	0.029 U	0.062	0.087	0.029 U			
Benzo(a)pyrene		0.029 U	0.029 U	0.056	0.13	0.029 U			
Chrysene		0.029 U	0.029 U	0.3	0.16	0.029 U			
Dibenzo(a,h)anthracene		0.029 U	0.029 U	0.032 U	0.038	0.029 U			
Fluoranthene		0.029 U	0.029 U	0.15	0.17	0.029 U			
Fluorene		0.029 U	0.029 U	0.032 U	0.16	0.029 U			
Indeno(1,2,3-cd)pyrene		0.029 U	0.029 U	0.043	0.076	0.029 U			
Naphthalene	1.8	0.029 U	0.029 U	0.062	0.22	0.029 U			
Phenanthrene		0.029 U	0.029 U	0.19	0.38	0.029 U			
Pyrene		0.029 U	0.029 U	0.14	0.088	0.029 U			
		PCBs (mg/kg)						
Aroclor 1016		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U			
Aroclor 1221		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U			
Aroclor 1232		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U			
Aroclor 1242		0.093 U	0.094 U	0.1 U	0.28	0.097 U			
Aroclor 1248		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U			
Aroclor 1254		0.19 U	0.19 U	0.21 U	0.26	0.19 U			
Aroclor 1260		0.19 U	0.19 U	0.21 U	0.2 U	0.19 U			
Total PCBs		0.845 U	0.850 U	0.920 U	1.136	0.865 U			
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)					
Antimony		1.1 UJ	1 UJ	1.3 UJ	NA	1 UJ			
Arsenic	25,000	10 J	8.3 J	9.5	NA	9 J			
Barium	870,000	88 J	87 J	170 J	NA	91 J			
Beryllium	44,000	1.1	1.1	1.2	NA	1.1			
Cadmium	59,000	0.56 U	0.52 U	0.85	NA	0.5 U			
Chromium	690	16 J	19 J	16 J	NA	21 J			
Copper		33 J	28 J	73 J	NA	30 J			
Lead		19	17	69 J	NA	19			
Mercury	52,000	0.029 U	0.028 U	0.18	NA	0.03 U			
Nickel	440,000	36 J	28 J	20 J	NA	33 J			
Selenium		1.1 U	1 U	1.3 U	NA	1 U			
Silver		1.1 U	1 U	1.3 U	NA	1 U			
Thallium		2.2	1.9	1.9	NA	1.9			
Zinc		52 J	45 J	100 J	NA	46 J			
Total Cyanide		0.32 U	0.27 U	0.35 U	NA	0.27 U			

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- (7) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			th (feet below grou		
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12
		TCL Vola	tiles (mg/kg)			
Acetone	100,000	0.079 U	0.082	0.069 U	0.065	0.036 U
Benzene	2.2	0.016 U	0.0089 U	0.014 U	0.12	0.0073 U
Bromodichloromethane	3,000	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Bromoform	140	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Bromomethane	3.9	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
2-Butanone		0.031 U	0.018 U	0.028 U	0.034	0.015 U
Carbon Disulfide	9	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Carbon Tetrachloride	0.9	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Chlorobenzene	1.3	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Chloroethane +	94	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
Chloroform	0.76	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Chloromethane +	1.1	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Dibromochloromethane	1,300	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,1-Dichloroethane	130	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,2-Dichloroethane	0.99	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,1-Dichloroethene	300	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
cis-1,2-Dichloroethene	1,200	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
trans-1,2-Dichloroethene	3,100	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,2-Dichloropropane	0.5	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
cis-1,3-Dichloropropene	0.39	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
trans-1,3-Dichloropropene	0.39	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Ethylbenzene	58	0.016 U	0.0089 U	0.014 U	0.37	0.0073 U
2-Hexanone +	0.72	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
4-Methyl-2-Pentanone		0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
Methylene Chloride	34	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
Methyl tert-butyl ether	140	NA	NA	NA	NA	0.0073 U
Styrene	430	0.016 U	0.0089 U	0.014 U	0.014	0.0073 U
1,1,2,2-Tetrachloroethane +	2,000	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Tetrachloroethene	28	0.023	0.0089 U	0.014 U	0.0094 U	0.0073 U
Toluene	42	0.016 U	0.0089 U	0.014 U	0.025	0.0073 U
1,1,1-Trichloroethane	1,200	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,1,2-Trichloroethane	1,800	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Trichloroethene	12	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Vinyl Chloride	1.1	0.031 U	0.018 U	0.028 U	0.019 U	0.0073 U
m,p-Xylene*	320	0.016 U	0.0089 U	0.014 U	0.057	NA
o-Xylene*	320	0.016 U	0.0089 U	0.014 U	0.17	NA
Xylenes, Total	320	NA	NA	NA	NA	0.015 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001		
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12		
		TCL Semivo	latiles (mg/kg)					
Bis(2-chloroethoxy)methane		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Bis(2-chloroethyl)ether **	0.66	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Bis(2-ethylhexyl)phthalate	31,000	9.7	0.4 U	0.39 U	2.1	0.43 U		
4-Bromophenyl phenyl ether		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Butyl benzyl phthalate	930	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Carbazole		1.9 U	0.4 U	0.39 U	0.87	0.87		
4-Chloro-3-methylphenol		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
4-Chloroaniline		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2-Chloronaphthalene		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2-Chlorophenol	53,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
4-Chlorophenyl phenyl ether		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Dibenzofuran		1.9 U	0.4 U	0.39 U	0.35 U	1.8		
1,2-Dichlorobenzene	310	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
1,3-Dichlorobenzene +	570	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
1,4-Dichlorobenzene	340	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
3,3'-Dichlorobenzidine		3.9 U	0.79 U	0.77 U	0.69 U	0.86 U		
2,4-Dichlorophenol		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Diethyl phthalate	2,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Dimethyl phthalate +	1,300	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Di-n-butyl phthalate	2,300	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2,4-Dimethylphenol		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
4,6-Dinitro-2-methylphenol		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
2,4-Dinitrophenol		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
2,4-Dinitrotoluene		1.9 U	0.4 U	0.39 U	0.35 U	0.22 U		
2,6-Dinitrotoluene		1.9 U	0.4 U	0.39 U	0.35 U	0.22 U		
Di-n-octyl phthalate	10,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Hexachlorobenzene	2.6	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Hexachlorobutadiene +	180	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Hexachlorocyclopentadiene **	1.1	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Hexachloroethane		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Isophorone	4,600	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2-Methylnaphthalene		1.9 U	0.4 U	0.39 U	1.7	2.8		
2-Methylphenol		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
4-Methylphenol		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2-Nitroaniline + **	7.5	9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
3-Nitroaniline		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
4-Nitroaniline		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
Nitrobenzene	9.4	1.9 U	0.4 U	0.39 U	0.35 U	0.22 U		
2-Nitrophenol		9.4 U	1.9 U	1.9 U	1.7 U	0.43 U		
4-Nitrophenol		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
N-Nitrosodi-n-propylamine		1.9 U	0.4 U	0.39 U	0.35 U	0.22 U		
N-Nitrosodiphenylamine		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2, 2'-Oxybis(1-Chloropropane)		0.082 U	0.017 U	0.016 U	0.015 U	0.43 U		
Pentachlorophenol		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
Phenol		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
1,2,4-Trichlorobenzene	920	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2,4,5-Trichlorophenol		3.9 U	0.79 U	0.77 U	0.69 U	0.86 U		
2,4,6-Trichlorophenol	540	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) ** Several values exceeded non-TACO or TACO screening levels but were consistently non-detect so no values were shaded.

 (7) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued) Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration								
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001				
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12				
		PAHs	(mg/kg)							
Acenaphthene		0.15 U	0.03 U	0.029 U	0.74	4.9				
Acenaphthylene		0.15 U	0.03 U	0.029 U	0.65	0.73				
Anthracene		0.16	0.03 U	0.029 U	1.9	6.4				
Benzo(a)anthracene		0.15 U	0.03 U	0.029 U	2.5	5.8				
Benzo(b)fluoranthene		0.78	0.03 U	0.029 U	2	4.5				
Benzo(k)fluoranthene		0.81	0.03 U	0.029 U	1.9	4.1				
Benzo(g,h,i)perylene		1.1	0.03 U	0.029 U	1.3	2.7				
Benzo(a)pyrene		0.45	0.03 U	0.029 U	2.4	5.9				
Chrysene		0.83	0.03 U	0.029 U	3.9	5.4				
Dibenzo(a,h)anthracene		0.25	0.03 U	0.029 U	0.37	0.83				
Fluoranthene		0.45	0.03 U	0.029 U	4.1	13				
Fluorene		0.15 U	0.03 U	0.029 U	1.2	3.8				
Indeno(1,2,3-cd)pyrene		0.69	0.03 U	0.029 U	0.94	2.4				
Naphthalene	1.8	0.15 U	0.03 U	0.029 U	1.8	6.5				
Phenanthrene		0.42	0.03 U	0.029 U	3.6	17				
Pyrene		0.64	0.03 U	0.029 U	6.8	14				
		PCBs (mg/kg)								
Aroclor 1016		0.094 U	0.096 U	0.093 U	0.084 U	NA				
Aroclor 1221		0.094 U	0.096 U	0.093 U	0.084 U	NA				
Aroclor 1232		0.094 U	0.096 U	0.093 U	0.084 U	NA				
Aroclor 1242		1.5	0.096 U	0.093 U	5.2 U	NA				
Aroclor 1248		0.094 U	0.096 U	0.093 U	0.084 U	NA				
Aroclor 1254		1	0.19 U	0.19 U	5.2 U	NA				
Aroclor 1260		0.19 U	0.19 U	0.19 U	0.17 U	NA				
Total PCBs		3.066	0.860 U	0.845 U	10.906 U	NA				
		t Metals and Total			·					
Antimony		0.98 J	1.1 UJ	1.2 UJ	0.95 UJ	NA				
Arsenic	25,000	3.8	13 J	9.3 J	7.6	NA				
Barium	870,000	140 J	79 J	94 J	59 J	NA				
Beryllium	44,000	1.1	1.2	1.2	0.63	NA				
Cadmium	59,000	1.5	0.57 U	0.58 U	1.1	NA				
Chromium	690	21 J	20 J	20 J	13 J	NA				
Copper		79 J	31 J	33 J	42 J	NA				
Lead		210 J	19	20	240 J	NA				
Mercury	52,000	0.38	0.03 U	0.026 U	0.3	NA				
Nickel	440,000	16 J	39 J	35 J	17 J	NA				
Selenium		0.94 U	1.1 U	1.2 U	0.95 U	NA				
Silver		0.94 U	1.1 U	1.2 U	0.95 U	NA				
<u> Thallium</u>		1.3	1.8	2.3	0.95 U	NA				
Zinc		290 J	52 J	45 J	140 J	NA				
Total Cyanide		0.28 U	0.32 U	0.31 U	1.3	NA				

- (1) mg/kg milligrams per kilogram.
 (2) PAHs Polynuclear Aromatic Hydrocarbons.
 (3) -- Toxicity criteria not available for exposure route.
- $(4)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) NA Not analyzed.
- (8) J Indicates an estimated value.
- $(9)\ Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample		th (feet below grou	nd surface)/Conce	ntration
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20
		TCL Volat	iles (mg/kg)			
Acetone	100,000	0.031 U	0.035 U	0.032 U	0.036 U	0.03 U
Benzene	2.2	0.0062 U	0.05	0.0065 U	0.0072 U	0.0059 U
Bromodichloromethane	3,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Bromoform	140	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Bromomethane	3.9	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
2-Butanone		0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Carbon Disulfide	9	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Carbon Tetrachloride	0.9	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Chlorobenzene	1.3	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Chloroethane +	94	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Chloroform	0.76	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Chloromethane +	1.1	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Dibromochloromethane	1,300	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1-Dichloroethane	130	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,2-Dichloroethane	0.99	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1-Dichloroethene	300	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
cis-1,2-Dichloroethene	1,200	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
trans-1,2-Dichloroethene	3,100	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,2-Dichloropropane	0.5	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
cis-1,3-Dichloropropene	0.39	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
trans-1,3-Dichloropropene	0.39	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Ethylbenzene	58	0.0062 U	0.33	0.0065 U	0.0072 U	0.0059 U
2-Hexanone +	0.72	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
4-Methyl-2-Pentanone		0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Methylene Chloride	34	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Methyl tert-butyl ether	140	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Styrene	430	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1,2,2-Tetrachloroethane +	2,000	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Tetrachloroethene	28	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Toluene	42	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1,1-Trichloroethane	1,200	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1,2-Trichloroethane	1,800	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Trichloroethene	12	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Vinyl Chloride	1.1	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
m,p-Xylene*	320	NA	NA	NA	NA	NA
o-Xylene*	320	NA	NA	NA	NA	NA
Xylenes, Total	320	0.012 U	0.26	0.013 U	0.014 U	0.012 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7)* The "total xylenes" screening level was used because it is more conservative.
 (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration										
	Tier 1									
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002				
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20				
	п		latiles (mg/kg)	T						
Bis(2-chloroethoxy)methane		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
Bis(2-chloroethyl)ether	0.66	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
Bis(2-ethylhexyl)phthalate	31,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
4-Bromophenyl phenyl ether		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
Butyl benzyl phthalate	930	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
Carbazole		0.42 U	1.1	0.41 U	0.57	0.41 U				
4-Chloro-3-methylphenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
4-Chloroaniline		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
2-Chloronaphthalene		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
2-Chlorophenol	53,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
4-Chlorophenyl phenyl ether		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
Dibenzofuran		0.42 U	2.5	0.41 U	1.5	0.41 U				
1,2-Dichlorobenzene	310	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
1,3-Dichlorobenzene +	570	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
1,4-Dichlorobenzene	340	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
3,3´-Dichlorobenzidine		0.83 U	0.88 U	0.82 U	0.89 U	0.82 U				
2,4-Dichlorophenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
Diethyl phthalate	2,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
Dimethyl phthalate +	1,300	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
Di-n-butyl phthalate	2,300	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
2,4-Dimethylphenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
4,6-Dinitro-2-methylphenol		2 U	2.1 U	2 U	2.2 U	2 U				
2,4-Dinitrophenol		2 U	2.1 U	2 U	2.2 U	2 U				
2,4-Dinitrotoluene		0.21 U	0.23 U	0.21 U	0.23 U	0.21 U				
2,6-Dinitrotoluene		0.21 U	0.23 U	0.21 U	0.23 U	0.21 U				
Di-n-octyl phthalate	10,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
Hexachlorobenzene	2.6	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
Hexachlorobutadiene +	180	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
Hexachlorocyclopentadiene	1.1	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
Hexachloroethane	4,600	0.42 U 0.42 U	0.44 U 0.44 U	0.41 U 0.41 U	0.44 U 0.44 U	0.41 U 0.41 U				
Isophorone	4,000	0.42 U	27	0.41 U	2.5	1.1				
2-Methylnaphthalene		0.42 U	0.44 U	0.41 U	0.44 U					
2-Methylphenol 4-Methylphenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U 0.41 U				
2-Nitroaniline +	7.5	2 U	2.1 U	2 U	2.2 U	2 U				
3-Nitroaniline		2 U	2.1 U	2 U	2.2 U	2 U				
4-Nitroaniline		2 U	2.1 U	2 U	2.2 U	2 U				
Nitrobenzene	9.4	0.21 U	0.23 U	0.21 U	0.23 U	0.21 U				
2-Nitrophenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
4-Nitrophenol		2 U	2.1 U	2 U	2.2 U	2 U				
N-Nitrosodi-n-propylamine		0.21 U	0.23 U	0.21 U	0.23 U	0.21 U				
N-Nitrosodiphenylamine		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
2, 2'-Oxybis(1-Chloropropane)		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
Pentachlorophenol		2 U	2.1 U	2 U	2.2 U	2 U				
Phenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
1,2,4-Trichlorobenzene	920	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
2,4,5-Trichlorophenol		0.83 U	0.88 U	0.82 U	0.89 U	0.82 U				
2,4,6-Trichlorophenol	540	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U				
NOTES:	210	0.72 0	0.77 0	0.71 0	U.TT U	5.11 0				

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002			
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20			
	· · · · · · · · · · · · · · · · · · ·	PAHs ((mg/kg)						
Acenaphthene		0.17	22	0.074	5.9	0.41			
Acenaphthylene		0.033	2.7	0.031 U	0.99	0.031 U			
Anthracene		0.19	11	0.031 U	9.5	0.16			
Benzo(a)anthracene		0.17	9	0.032	8.6	0.11			
Benzo(b)fluoranthene		0.075	4.5	0.031 U	5.5	0.063			
Benzo(k)fluoranthene		0.12	5.1	0.031 U	6.2	0.082			
Benzo(g,h,i)perylene		0.046	3.9	0.031 U	5.5	0.034			
Benzo(a)pyrene		0.086	4.6	0.031 U	9.8	0.088			
Chrysene		0.2	8	0.048	8.1	0.14			
Dibenzo(a,h)anthracene		0.031 U	0.91	0.031 U	1.2	0.031 U			
Fluoranthene		0.42	20	0.072	20	0.22			
Fluorene		0.13	13	0.04	3.5	0.26			
Indeno(1,2,3-cd)pyrene		0.035	2.5	0.031 U	4.2	0.031 U			
Naphthalene	1.8	0.4	33	0.13	5.3	7.8			
Phenanthrene		0.6	43	0.12	21	0.52			
Pyrene		0.52	26	0.088	22	0.21			
		PCBs ((mg/kg)						
Aroclor 1016		NA	NA	NA	NA	NA			
Aroclor 1221		NA	NA	NA	NA	NA			
Aroclor 1232		NA	NA	NA	NA	NA			
Aroclor 1242		NA	NA	NA	NA	NA			
Aroclor 1248		NA	NA	NA	NA	NA			
Aroclor 1254		NA	NA	NA	NA	NA			
Aroclor 1260		NA	NA	NA	NA	NA			
Total PCBs		NA	NA	NA	NA	NA			
	Priority	Pollutant Metals a							
Antimony		NA	NA	NA	NA	NA			
Arsenic	25,000	NA	NA	NA	NA	NA			
Barium	870,000	NA	NA	NA	NA	NA			
Beryllium	44,000	NA	NA	NA	NA	NA			
Cadmium	59,000	NA	NA	NA	NA	NA			
Chromium	690	NA	NA	NA	NA	NA			
Copper		NA	NA	NA	NA	NA			
Lead		NA	NA	NA	NA	NA			
Mercury	52,000	NA	NA	NA	NA	NA			
Nickel	440,000	NA	NA	NA	NA	NA			
Selenium		NA	NA	NA	NA	NA			
Silver		NA	NA	NA	NA	NA			
Thallium		NA	NA	NA	NA	NA			
Zinc		NA	NA	NA	NA	NA			
Total Cyanide		NA	NA	NA	NA	NA			

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1				nd surface)/Conce	
	Screening	SB49-001	SB49B-001	SB50-002	SB50-003	SB51-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	14 - 16	20 - 22	10 -12
		TCL Vola	tiles (mg/kg)			
Acetone	100,000	0.029 U	0.031 U	1.9 U	0.037 UJ	0.03 U
Benzene	2.2	0.0059 U	0.0063 U	2.9	0.0073 UJ	3.7
Bromodichloromethane	3,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Bromoform	140	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Bromomethane	3.9	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
2-Butanone		0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Carbon Disulfide	9	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Carbon Tetrachloride	0.9	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Chlorobenzene	1.3	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Chloroethane +	94	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Chloroform	0.76	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Chloromethane +	1.1	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Dibromochloromethane	1,300	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1-Dichloroethane	130	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,2-Dichloroethane	0.99	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1-Dichloroethene	300	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
cis-1,2-Dichloroethene	1,200	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
trans-1,2-Dichloroethene	3,100	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,2-Dichloropropane	0.5	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
cis-1,3-Dichloropropene	0.39	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
trans-1,3-Dichloropropene	0.39	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Ethylbenzene	58	0.0059 U	0.0063 U	30	0.56	5.8
2-Hexanone + **	0.72	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
4-Methyl-2-Pentanone		0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Methylene Chloride	34	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Methyl tert-butyl ether	140	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Styrene	430	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1,2,2-Tetrachloroethane +	2,000	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Tetrachloroethene	28	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Toluene	42	0.0059 U	0.0063 U	0.38 U	0.018 J	0.0094
1,1,1-Trichloroethane	1,200	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1,2-Trichloroethane	1,800	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Trichloroethene	12	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Vinyl Chloride	1.1	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
m,p-Xylene*	320	NA	NA	NA	NA	NA
o-Xylene*	320	NA	NA	NA	NA	NA
Xylenes, Total	320	0.012 U	0.013 U	21	2.1 Ј	3.9

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3) \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) Shaded value exceeds Tier 1 screening level.
- (5) J Indicates an estimated value.
- (6) -- Toxicity criteria not available for exposure route.
- (7) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (8) NA Not analyzed.
- (9) * The "total xylenes" screening level was used because it is more conservative.
- (10) ** Several values exceeded non-TACO screening level but were consistently non-detect, so no values were shaded.
- (11) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SP40-001, SP45-002, SB50-001, SP57-001, and SP58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

i		er 1 Sample Location and Depth (feet below ground surface)/Concentration								
	Tier 1									
G 1/A 1 /	Screening	SB49-001	SB49B-001	SB50-002	SB50-003	SB51-001				
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	14 - 16	20 - 22	10 -12				
5: (2.11	П		latiles (mg/kg)	0		0				
Bis(2-chloroethoxy)methane		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
Bis(2-chloroethyl)ether	0.66	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
Bis(2-ethylhexyl)phthalate	31,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
4-Bromophenyl phenyl ether		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
Butyl benzyl phthalate	930	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
Carbazole		0.42 U	0.41 U	0.46 U	0.45 U	4.8				
4-Chloro-3-methylphenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
4-Chloroaniline		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
2-Chloronaphthalene		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
2-Chlorophenol	53,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
4-Chlorophenyl phenyl ether		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
Dibenzofuran		0.42 U	0.41 U	1.2	0.45 U	3.4				
1,2-Dichlorobenzene	310	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
1,3-Dichlorobenzene +	570	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
1,4-Dichlorobenzene	340	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
3,3´-Dichlorobenzidine		0.84 U	0.82 U	0.91 U	0.89 U	0.87 U				
2,4-Dichlorophenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
Diethyl phthalate	2,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
Dimethyl phthalate +	1,300	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
Di-n-butyl phthalate	2,300	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
2,4-Dimethylphenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
4,6-Dinitro-2-methylphenol		2 U	2 U	2.2 U	2.2 U	2.1 U				
2,4-Dinitrophenol		2 U	2 U	2.2 U	2.2 U	2.1 U				
2,4-Dinitrotoluene		0.22 U	0.21 U	0.23 U	0.23 U	0.22 U				
2,6-Dinitrotoluene		0.22 U	0.21 U	0.23 U	0.23 U	0.22 U				
Di-n-octyl phthalate	10,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
Hexachlorobenzene	2.6	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
Hexachlorobutadiene +	180	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
Hexachlorocyclopentadiene	1.1	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
Hexachloroethane		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
Isophorone	4,600	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
2-Methylnaphthalene		0.42 U	0.41 U	7.5	0.45 U	52				
2-Methylphenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
4-Methylphenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
2-Nitroaniline +	7.5	2 U	2 U	2.2 U	2.2 U	2.1 U				
3-Nitroaniline		2 U	2 U	2.2 U	2.2 U	2.1 U				
4-Nitroaniline		2 U	2 U	2.2 U	2.2 U	2.1 U				
Nitrobenzene	9.4	0.22 U	0.21 U	0.23 U	0.23 U	0.22 U				
2-Nitrophenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
4-Nitrophenol		2 U	2 U	2.2 U	2.2 U	2.1 U				
N-Nitrosodi-n-propylamine		0.22 U	0.21 U	0.23 U	0.23 U	0.22 U				
N-Nitrosodiphenylamine		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
2, 2'-Oxybis(1-Chloropropane)		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
Pentachlorophenol		2 U	2 U	2.2 U	2.2 U	2.1 U				
Phenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
1,2,4-Trichlorobenzene	920	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				
2,4,5-Trichlorophenol		0.84 U	0.82 U	0.91 U	0.89 U	0.87 U				
2,4,6-Trichlorophenol	540	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U				

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued) Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

-	Tier 1	Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	Screening	SB49-001	SB49B-001	SB50-002	SB50-003	SB51-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	14 - 16	20 - 22	10 -12
		PAHs	(mg/kg)			
Acenaphthene		0.32	0.031 U	3	0.086	28
Acenaphthylene		0.19	0.031 U	0.44	0.034 U	4.1
Anthracene		0.44	0.031 U	2.6	0.18	20
Benzo(a)anthracene		1	0.035	3.9	0.42	17
Benzo(b)fluoranthene		0.78	0.031 U	2.4	0.27	8.2
Benzo(k)fluoranthene		0.74	0.032	3.8	0.38	7.4
Benzo(g,h,i)perylene		0.68	0.031 U	0.74	0.077	8
Benzo(a)pyrene		1	0.041	4.4	0.46	16
Chrysene		1	0.053	3.1	0.42	17
Dibenzo(a,h)anthracene		0.11	0.031 U	0.24	0.037	1.4
Fluoranthene		1.9	0.058	7.2	0.66	36
Fluorene		0.24	0.031 U	2.2	0.098	21
Indeno(1,2,3-cd)pyrene		0.55	0.031 U	0.89	0.098	6.2
Naphthalene	1.8	0.2	0.041	44	0.52	67
Phenanthrene		1.3	0.079	8.7	0.46	78
Pyrene		2.1	0.078	6.4	0.55	50
		PCBs	(mg/kg)			
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA
	Priority	Pollutant Metals	and Total Cyanide	(mg/kg)		
Antimony		NA	NA	NA	NA	NA
Arsenic	25,000	NA	NA	NA	NA	NA
Barium	870,000	NA	NA	NA	NA	NA
Beryllium	44,000	NA	NA	NA	NA	NA
Cadmium	59,000	NA	NA	NA	NA	NA
Chromium	690	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA
Mercury	52,000	NA	NA	NA	NA	NA
Nickel	440,000	NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA
Thallium		NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA
Total Cyanide		NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640	North	Kings	bury	Portion

	Tier 1		Sample Location	and Depth (feet be	elow ground surfa	ce)/Concentration	
	Screening	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	Level (mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
		Te	CL Volatiles (mg/l	(g)			
Acetone	100,000	0.027 U	1.4 U	0.027 UJ	0.036 U	0.1	0.031 UJ
Benzene	2.2	0.0055 U	2.6	0.0089 J	0.0086	0.21	0.0062 UJ
Bromodichloromethane	3,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Bromoform	140	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Bromomethane	3.9	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
2-Butanone		0.011 U	0.55 U	0.011 UJ	0.015 U	0.023	0.012 UJ
Carbon Disulfide	9	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Carbon Tetrachloride	0.9	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chlorobenzene	1.3	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chloroethane +	94	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
Chloroform	0.76	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chloromethane +	1.1	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Dibromochloromethane	1,300	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1-Dichloroethane	130	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,2-Dichloroethane	0.99	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1-Dichloroethene	300	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
cis-1,2-Dichloroethene	1,200	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
trans-1,2-Dichloroethene	3,100	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,2-Dichloropropane	0.5	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
cis-1,3-Dichloropropene	0.39	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
trans-1,3-Dichloropropene	0.39	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Ethylbenzene	58	0.0055 U	11	0.043 J	0.0073 U	1.2	0.0062 UJ
2-Hexanone +	0.72	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
4-Methyl-2-Pentanone		0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
Methylene Chloride	34	0.011 U	0.55 U	0.011 UJ	0.018	0.035	0.026 J
Methyl tert-butyl ether	140	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Styrene	430	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1,2,2-Tetrachloroethane +	2,000	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Tetrachloroethene	28	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Toluene	42	0.0055 U	0.7	0.0097 J	0.0073 U	0.013	0.0062 UJ
1,1,1-Trichloroethane	1,200	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1,2-Trichloroethane	1,800	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Trichloroethene	12	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Vinyl Chloride	1.1	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
m,p-Xylene*	320	NA	NA	NA	NA	NA	NA
o-Xylene*	320	NA	NA	NA	NA	NA	NA
Xylenes, Total	320	0.024	9.8	0.055 J	0.015 U	1.7	0.012 UJ

- NOTES:
 (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) Shaded value exceeds Tier 1 screening level.
- (5) J Indicates an estimated value.
- (6) -- Toxicity criteria not available for exposure route.
- (7) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (8) NA Not analyzed.
- (9) * The "total xylenes" screening level was used because it is more conservative.
- $(10)\ Soil\ samples\ (SP10-001,\ SP18B-002,\ SB21-002,\ SB22-001,\ SB23-003,\ SB24-002,\ SB26-001,\ SP40-001,\ SB45-002,\ SB50-001,\ SB57-001,\ and\ SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scheduling Signature Sig		Tier 1		Sample Location	and Depth (feet be	elow ground surface	ce)/Concentration	
Compound/Analy Level (mg/kg) 18 - 20		Screening	SB51-002	_				SB53-003
BBC2-chlorosthoxylmethane	Compound/Analyte		18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
BaC2-chirorechtylicher		<u>., </u>	TCI	Semivolatiles (m	g/kg)			
Bist/2-ethylhexylphthalatale	Bis(2-chloroethoxy)methane		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Bist/2-ethylhexylphthalatale		0.66	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Buyl benzyl phthalate 930		31,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Carbazole	4-Bromophenyl phenyl ether		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Chloros-methylphenol	Butyl benzyl phthalate	930	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Chloroamiline			0.41 U	0.4 U	0.39 U	0.41 U	5.1	0.4 U
2-Chlorophenol	4-Chloro-3-methylphenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Chlorophenol	4-Chloroaniline		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
A-Chlorophenyl phenyl ether	2-Chloronaphthalene		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Dibenzofuran	2-Chlorophenol	53,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,2-Dichlorobenzene	4-Chlorophenyl phenyl ether		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,3-Dichlorobenzene + 570	Dibenzofuran		0.82	0.91	0.39 U	0.41 U	4.9	0.4 U
1,4-Dichlorobenzene	1,2-Dichlorobenzene	310	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
3.3 - Dichlorobenzidine 0.82 U 0.8 U 0.77 U 0.82 U 0.85 U 0.8 U 2.4 - Dichlorophenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Diethyl phthalate 2,000 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Dien-buyl phthalate 2,300 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2.4-Dimethylphenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 4.6-Dinitro-2-methylphenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2.4-Dinitrotoluene 0.21 U 0.21 U 0.2 U 0.21 U 0.22 U <	1,3-Dichlorobenzene +	570	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2.4-Dichlorophenol	1,4-Dichlorobenzene	340	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Diethyl phthalate	3,3´-Dichlorobenzidine		0.82 U	0.8 U	0.77 U	0.82 U	0.85 U	0.8 U
Dimethyl phthalate +	2,4-Dichlorophenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Din-buyl phthalate	Diethyl phthalate	2,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2.4-Dimethylphenol	Dimethyl phthalate +	1,300	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4,6-Dinitro-2-methylphenol 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 2,4-Dinitrophenol 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 2,4-Dinitrotoluene 0.21 U 0.21 U 0.2 U 0.21 U 0.22 U 0.21 U 0.21 U 0.22 U 0.21 U<	Di-n-butyl phthalate	2,300	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2.4-Dinitrophenol 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 2.4-Dinitrotoluene 0.21 U 0.21 U 0.2 U 0.21 U 0.22 U 0.21 U 2.6-Dinitrotoluene 0.21 U 0.21 U 0.2 U 0.21 U 0.22 U 0.21 U Di-n-octyl phthalate 10,000 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Hexachlorobenzene 2.6 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Hexachlorobutadiene + 180 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Hexachlorocyclopentadiene 1.1 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Hexachlorocyclopentadiene 1.1 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Hexachlorocyclopentadiene 1.1 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Hexachlorocyclopentadiene	2,4-Dimethylphenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2.4-Dinitrotoluene 0.21 U 0.22 U 0.21 U 0.24 U 0.43 U 0.44 U 0.44 U 0.39 U 0.41 U 0.43 U 0.44 U 0.44 U 0.39 U 0.41 U 0.43 U 0.44 U 0.44 U 0.39 U 0.41 U 0.43 U 0.44 U 0.44 U 0.39 U 0.41 U 0.43 U 0.44 U 0.44 U 0.39 U 0.41 U 0.43 U 0.44 U <td< td=""><td>4,6-Dinitro-2-methylphenol</td><td></td><td>2 U</td><td>1.9 U</td><td>1.9 U</td><td>2 U</td><td>2.1 U</td><td>1.9 U</td></td<>	4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
2.6-Dinitrotoluene	2,4-Dinitrophenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
Din-octyl phthalate	2,4-Dinitrotoluene		0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
Hexachlorobenzene	2,6-Dinitrotoluene		0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
Hexachlorobutadiene + 180	Di-n-octyl phthalate	10,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorocyclopentadiene	Hexachlorobenzene	2.6	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachloroethane	Hexachlorobutadiene +	180	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Isophorone	Hexachlorocyclopentadiene	1.1	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Methylnaphthalene 4.5 19 1.8 0.41 U 37 0.4 U 2-Methylphenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 4-Methylphenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2-Nitroaniline + 7.5 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 3-Nitroaniline 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 4-Nitroaniline 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 4-Nitrobenzene 9.4 0.21 U 0.21 U 0.2 U 0.21 U 0.22 U 0.21 U 2-Nitrophenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2-Nitrophenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2-Nitrophenol 0.21 U 0.21 U 0.22 U 0.21 U 0.22 U 0.21 U 0.22 U 0.21 U 0.4 U N-Nitros	Hexachloroethane		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Methylphenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 4-Methylphenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2-Nitroaniline + 7.5 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 3-Nitroaniline 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 4-Nitroaniline 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 4-Nitroaniline 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 4-Nitrobenzene 9.4 0.21 U 0.21 U 0.2 U 0.21 U 0.22 U 0.21 U 2-Nitrophenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2-Nitrophenol 0.21 U 0.21 U </td <td>Isophorone</td> <td>4,600</td> <td>0.41 U</td> <td>0.4 U</td> <td>0.39 U</td> <td>0.41 U</td> <td>0.43 U</td> <td>0.4 U</td>	Isophorone	4,600	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Methylphenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2-Nitroaniline + 7.5 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 3-Nitroaniline 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 4-Nitroaniline 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 4-Nitroaniline 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U Nitrobenzene 9.4 0.21 U 0.21 U 0.2 U 0.21 U 0.22 U 0.21 U 2-Nitrophenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 4-Nitrophenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 4-Nitrophenol 0.21 U 0.21 U 0.21 U 0.21 U 0.21 U 0.22 U 0.21 U 0.4 U N-Nitrosodiphenylamine 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2 C'Oxybis(1-Chloropropa			4.5	19	1.8	0.41 U	37	0.4 U
2-Nitroaniline + 7.5 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 3-Nitroaniline + 2 U 1.9 U 1.9 U 2.1 U 1.9								
3-Nitroaniline 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 4-Nitroaniline 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U 1.								
4-Nitroaniline 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U Nitrobenzene 9.4 0.21 U 0.21 U 0.2 U 0.21 U 0.22 U 0.21 U 2-Nitrophenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 4-Nitrophenol 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U N-Nitrosodi-n-propylamine 0.21 U 0.21 U 0.2 U 0.21 U 0.22 U 0.21 U N-Nitrosodiphenylamine 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2, 2-Oxybis(1-Chloropropane) 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Pentachlorophenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Phenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 1,2,4-Trichlorobenzene 920 0.41 U 0.4 U								
Nitrobenzene 9,4 0.21 U 0.21 U 0.2 U 0.21 U 0.21 U 2-Nitrophenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 4-Nitrophenol 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U N-Nitrosodi-n-propylamine 0.21 U 0.21 U 0.2 U 0.21 U 0.22 U 0.21 U N-Nitrosodiphenylamine 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2, 2-Oxybis(1-Chloropropane) 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Pentachlorophenol 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U Phenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 1,2,4-Trichlorobenzene 920 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2,4,5-Trichlorophenol 0.82 U 0.8 U 0.77								
2-Nitrophenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 4-Nitrophenol 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U N-Nitrosodi-n-propylamine 0.21 U 0.21 U 0.2 U 0.21 U 0.22 U 0.21 U N-Nitrosodiphenylamine 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2, 2-Oxybis(1-Chloropropane) 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Pentachlorophenol 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U Phenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 1,2,4-Trichlorobenzene 920 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2,4,5-Trichlorophenol 0.82 U 0.8 U 0.77 U 0.82 U 0.85 U 0.8 U								
4-Nitrophenol 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U N-Nitrosodi-n-propylamine 0.21 U 0.21 U 0.2 U 0.21 U 0.22 U 0.21 U N-Nitrosodiphenylamine 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2, 2-Oxybis(1-Chloropropane) 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Pentachlorophenol 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U Phenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 1,2,4-Trichlorobenzene 920 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2,4,5-Trichlorophenol 0.82 U 0.8 U 0.77 U 0.82 U 0.85 U 0.8 U								
N-Nitrosodi-n-propylamine 0.21 U 0.21 U 0.2 U 0.21 U 0.41 U 0.41 U 0.39 U 0.41 U 0.43 U 0.4 U Pentachlorophenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Phenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 1,2,4-Trichlorobenzene 920 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2,4,5-Trichlorophenol 0.82 U 0.8 U 0.77 U 0.82 U 0.85 U 0.8 U	1							
N-Nitrosodiphenylamine 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 0.4 U 0.59 U 0.41 U 0.43 U 0.44 U 0.45 U	1							
2, 2'-Oxybis(1-Chloropropane) 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U Pentachlorophenol 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U Phenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 1,2,4-Trichlorobenzene 920 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2,4,5-Trichlorophenol 0.82 U 0.8 U 0.77 U 0.82 U 0.85 U 0.8 U		-						
Pentachlorophenol 2 U 1.9 U 1.9 U 2 U 2.1 U 1.9 U Phenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 1,2,4-Trichlorobenzene 920 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2,4,5-Trichlorophenol 0.82 U 0.8 U 0.77 U 0.82 U 0.85 U 0.8 U	1 ,							
Phenol 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 1,2,4-Trichlorobenzene 920 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2,4,5-Trichlorophenol 0.82 U 0.8 U 0.77 U 0.82 U 0.85 U 0.8 U								
1,2,4-Trichlorobenzene 920 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U 2,4,5-Trichlorophenol 0.82 U 0.8 U 0.77 U 0.82 U 0.85 U 0.8 U								
2,4,5-Trichlorophenol 0.82 U 0.8 U 0.77 U 0.82 U 0.85 U 0.8 U								
2,4,6-Trichlorophenol 540 0.41 U 0.4 U 0.39 U 0.41 U 0.43 U 0.4 U								
	2,4,6-Trichlorophenol NOTES:	540	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration									
	Screening	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003				
Compound/Analyte	Level (mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20				
	<u> </u>		PAHs (mg/kg)								
Acenaphthene		2.4	3.7	0.19	2	16	0.11				
Acenaphthylene		0.47	1	0.066	1.6	2.4	0.046				
Anthracene		2.2	2.2	0.12	2.6	16	0.12				
Benzo(a)anthracene		2.3	1.8	0.091	5.2	14	0.12				
Benzo(b)fluoranthene		1.2	0.71	0.038	1.4	6.4	0.054				
Benzo(k)fluoranthene		1.1	0.31	0.035	1.8	6.5	0.076				
Benzo(g,h,i)perylene		0.57	0.18	0.029 U	1	1.6	0.042				
Benzo(a)pyrene		1.7	1.3	0.07	4.8	11	0.099				
Chrysene		2	1.7	0.096	6.8	15	0.14				
Dibenzo(a,h)anthracene		0.11	0.1	0.029 U	0.5	1.2	0.03 U				
Fluoranthene		3.7	2.7	0.15	7.8	24	0.22				
Fluorene		2.5	3.6	0.2	4	19	0.13				
Indeno(1,2,3-cd)pyrene		0.59	0.35	0.029 U	0.92	1.8	0.031				
Naphthalene	1.8	6.1	22	2.3	1.5	41	0.24				
Phenanthrene		7.6	11	0.65	14	57	0.48				
Pyrene		4.2	4.5	0.22	12	27	0.27				
PCBs (mg/kg)											
Aroclor 1016		NA	NA	NA	NA	NA	NA				
Aroclor 1221		NA	NA	NA	NA	NA	NA				
Aroclor 1232		NA	NA	NA	NA	NA	NA				
Aroclor 1242		NA	NA	NA	NA	NA	NA				
Aroclor 1248		NA	NA	NA	NA	NA	NA				
Aroclor 1254		NA	NA	NA	NA	NA	NA				
Aroclor 1260		NA	NA	NA	NA	NA	NA				
Total PCBs		NA	NA	NA	NA	NA	NA				
	- 11	•	nt Metals and Total			T	T				
Antimony		NA	NA	NA	NA	NA	NA				
Arsenic	25,000	NA	NA	NA	NA	NA	NA				
Barium	870,000	NA	NA	NA	NA	NA	NA				
Beryllium	44,000	NA	NA	NA	NA	NA	NA				
Cadmium	59,000	NA	NA	NA	NA	NA	NA				
Chromium	690	NA	NA	NA	NA	NA	NA				
Copper		NA	NA	NA	NA	NA	NA				
Lead		NA	NA	NA	NA	NA	NA				
Mercury	52,000	NA	NA	NA	NA	NA	NA				
Nickel	440,000	NA NA	NA	NA NA	NA	NA	NA NA				
Selenium		NA	NA	NA NA	NA	NA	NA				
Silver		NA	NA	NA NA	NA NA	NA	NA NA				
Thallium		NA NA	NA	NA NA	NA	NA	NA				
Zinc		NA	NA	NA	NA	NA	NA				
Total Cyanide		NA	NA	NA	NA	NA	NA				

⁽¹⁾ mg/kg - milligrams per kilogram.
(2) PAHs - Polynuclear Aromatic Hydrocarbons.
(3) -- Toxicity criteria not available for exposure route.
(4) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽⁵⁾ Shaded value exceeds Tier 1 screening level.

⁽⁶⁾ PCBs - Polychlorinated Biphenyls.

⁽⁷⁾ NA - Not analyzed.

⁽⁸⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below gro	and surface)/Conce	entration
	Screening	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20
		TCL Volat	iles (mg/kg)			
Acetone	100,000	3.2 U	0.027 U	0.026	0.032 U	0.028 U
Benzene	2.2	5.7	0.0054 U	0.064	0.0064 U	0.0056 U
Bromodichloromethane	3,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Bromoform	140	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Bromomethane	3.9	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
2-Butanone		1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Carbon Disulfide	9	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Carbon Tetrachloride	0.9	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Chlorobenzene	1.3	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Chloroethane +	94	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Chloroform	0.76	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Chloromethane +	1.1	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Dibromochloromethane	1,300	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,1-Dichloroethane	130	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,2-Dichloroethane	0.99	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,1-Dichloroethene	300	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
cis-1,2-Dichloroethene	1,200	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
trans-1,2-Dichloroethene	3,100	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,2-Dichloropropane **	0.5	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
cis-1,3-Dichloropropene **	0.39	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
trans-1,3-Dichloropropene **	0.39	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Ethylbenzene	58	25	0.0054 U	0.11	0.0064 U	0.0056 U
2-Hexanone + **	0.72	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
4-Methyl-2-Pentanone		1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Methylene Chloride	34	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U
Methyl tert-butyl ether	140	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Styrene	430	0.64 U	0.0054 U	0.016	0.0064 U	0.0056 U
1,1,2,2-Tetrachloroethane +	2,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Tetrachloroethene	28	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Toluene	42	0.84	0.0054 U	0.066	0.0064 U	0.0056 U
1,1,1-Trichloroethane	1,200	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
1,1,2-Trichloroethane	1,800	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Trichloroethene	12	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
Vinyl Chloride	1.1	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U
m,p-Xylene*	320	NA	NA	NA	NA	NA
o-Xylene*	320	NA	NA	NA	NA	NA
Xylenes, Total	320	8.7	0.011 U	0.18	0.013 U	0.011 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) Shaded value exceeds Tier 1 screening level.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
- $(9) ** Several \ values \ exceeded \ non-TACO \ or \ TACO \ screening \ levels \ but \ were \ consistently \ non-detect, so \ no \ values \ were \ shaded.$
- $(10) \ Soil \ samples \ (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003)$ identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001			
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20			
	<u> </u>	TCL Semivol	atiles (mg/kg)						
Bis(2-chloroethoxy)methane		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
Bis(2-chloroethyl)ether	0.66	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
Bis(2-ethylhexyl)phthalate	31,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
4-Bromophenyl phenyl ether		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
Butyl benzyl phthalate	930	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
Carbazole		0.51	0.4 U	0.39 U	0.4 U	0.4 U			
4-Chloro-3-methylphenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
4-Chloroaniline		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
2-Chloronaphthalene		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
2-Chlorophenol	53,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
4-Chlorophenyl phenyl ether		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
Dibenzofuran		1.9	0.4 U	0.39 U	0.4 U	0.4 U			
1,2-Dichlorobenzene	310	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
1,3-Dichlorobenzene +	570	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
1,4-Dichlorobenzene	340	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
3,3´-Dichlorobenzidine		0.84 U	0.79 U	0.79 U	0.81 U	0.81 U			
2,4-Dichlorophenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
Diethyl phthalate	2,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
Dimethyl phthalate +	1,300	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
Di-n-butyl phthalate	2,300	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
2,4-Dimethylphenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.9 U	2 U	2 U			
2,4-Dinitrophenol		2 U	1.9 U	1.9 U	2 U	2 U			
2,4-Dinitrotoluene		0.22 U	0.2 U	0.2 U	0.21 U	0.21 U			
2,6-Dinitrotoluene		0.22 U	0.2 U	0.2 U	0.21 U	0.21 U			
Di-n-octyl phthalate	10,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
Hexachlorobenzene	2.6	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
Hexachlorobutadiene +	180	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
Hexachlorocyclopentadiene	1.1	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
Hexachloroethane		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
Isophorone	4,600	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
2-Methylnaphthalene		45	0.4 U	0.8	0.4 U	0.4 U			
2-Methylphenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
4-Methylphenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
2-Nitroaniline +	7.5	2 U	1.9 U	1.9 U	2 U	2 U			
3-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2 U			
4-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2 U			
Nitrobenzene	9.4	0.22 U	0.2 U	0.2 U	0.21 U	0.21 U			
2-Nitrophenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
4-Nitrophenol		2 U	1.9 U	1.9 U	2 U	2 U			
N-Nitrosodi-n-propylamine		0.22 U	0.2 U	0.2 U	0.21 U	0.21 U			
N-Nitrosodiphenylamine		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
2, 2'-Oxybis(1-Chloropropane)		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
Pentachlorophenol		2 U	1.9 U	1.9 U	2 U	2 U			
Phenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
1,2,4-Trichlorobenzene	920	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			
2,4,5-Trichlorophenol		0.84 U	0.79 U	0.79 U	0.81 U	0.81 U			
2,4,6-Trichlorophenol	540	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U			

⁽¹⁾ mg/kg - milligrams per kilogram.

⁽²⁾ TCL - Target compound list.

^{(3) --} Toxicity criteria not available for exposure route.

 $^{(4)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

^{(5) +} Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

⁽⁶⁾ Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dep		und surface)/Conce	
	Screening	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20
		PAHs	(mg/kg)			
Acenaphthene		12	0.046	0.078	0.03 U	0.031 U
Acenaphthylene		4	0.03 U	0.089	0.03 U	0.031 U
Anthracene		7.4	0.046	0.099	0.03 U	0.031 U
Benzo(a)anthracene		5.4	0.037	0.098	0.03 U	0.031 U
Benzo(b)fluoranthene		2.6	0.03 U	0.054	0.03 U	0.031 U
Benzo(k)fluoranthene		2.1	0.03 U	0.05	0.03 U	0.031 U
Benzo(g,h,i)perylene		1.8	0.03 U	0.033	0.03 U	0.031 U
Benzo(a)pyrene		4.8	0.034	0.092	0.03 U	0.031 U
Chrysene		5.3	0.045	0.1	0.03 U	0.031 U
Dibenzo(a,h)anthracene		0.6	0.03 U	0.029 U	0.03 U	0.031 U
Fluoranthene		9.6	0.062	0.16	0.03 U	0.031 U
Fluorene		9.3	0.049	0.15	0.03 U	0.031 U
Indeno(1,2,3-cd)pyrene		1.6	0.03 U	0.029 U	0.03 U	0.031 U
Naphthalene	1.8	110	0.26	0.95	0.03 U	0.031 U
Phenanthrene		27	0.15	0.58	0.067	0.037
Pyrene		14	0.095	0.31	0.03 U	0.031 U
		PCBs	(mg/kg)			
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA
	Priority	Pollutant Metals	and Total Cyanide	(mg/kg)		
Antimony		NA	NA	NA	NA	NA
Arsenic	25,000	NA	NA	NA	NA	NA
Barium	870,000	NA	NA	NA	NA	NA
Beryllium	44,000	NA	NA	NA	NA	NA
Cadmium	59,000	NA	NA	NA	NA	NA
Chromium	690	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA
Mercury	52,000	NA	NA	NA	NA	NA
Nickel	440,000	NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA
Thallium		NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA
Total Cyanide		NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration					
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002	
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18	
		TCL Vola	tiles (mg/kg)				
Acetone	100,000	0.028 U	0.047 U	0.031 UJ	0.028 U	0.033 U	
Benzene	2.2	0.0057 U	0.0094 U	0.0061 UJ	0.031	0.0067 U	
Bromodichloromethane	3,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Bromoform	140	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Bromomethane	3.9	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U	
2-Butanone		0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U	
Carbon Disulfide	9	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Carbon Tetrachloride	0.9	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Chlorobenzene	1.3	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Chloroethane +	94	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U	
Chloroform	0.76	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Chloromethane +	1.1	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Dibromochloromethane	1,300	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
1,1-Dichloroethane	130	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
1,2-Dichloroethane	0.99	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
1,1-Dichloroethene	300	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
cis-1,2-Dichloroethene	1,200	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
trans-1,2-Dichloroethene	3,100	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
1,2-Dichloropropane	0.5	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
cis-1,3-Dichloropropene	0.39	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
trans-1,3-Dichloropropene	0.39	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Ethylbenzene	58	0.0057 U	0.0094 U	0.0061 UJ	0.071	0.0067 U	
2-Hexanone +	0.72	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U	
4-Methyl-2-Pentanone		0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U	
Methylene Chloride	34	0.011 U	0.019 U	0.012 UJ	0.017	0.016	
Methyl tert-butyl ether	140	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Styrene	430	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
1,1,2,2-Tetrachloroethane +	2,000	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Tetrachloroethene	28	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Toluene	42	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
1,1,1-Trichloroethane	1,200	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
1,1,2-Trichloroethane	1,800	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Trichloroethene	12	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Vinyl Chloride	1.1	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
m,p-Xylene*	320	NA	NA	NA	NA	NA	
o-Xylene*	320	NA	NA	NA	NA	NA	
Xylenes, Total	320	0.011 U	0.019 U	0.012 UJ	0.044	0.013 U	

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) J Indicates an estimated value.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).

- (7) NA Not analyzed.
 (8) * The "total xylenes" screening level was used because it is more conservative.
 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			th (feet below grou		
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18
			latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Bis(2-chloroethyl)ether	0.66	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4-Bromophenyl phenyl ether		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Butyl benzyl phthalate	930	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Carbazole		0.39 U	6.8	0.41 U	0.39 U	0.38 U
4-Chloro-3-methylphenol		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4-Chloroaniline		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2-Chloronaphthalene		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2-Chlorophenol	53,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4-Chlorophenyl phenyl ether		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Dibenzofuran		0.39 U	4.6	0.41 U	0.39 U	0.38 U
1,2-Dichlorobenzene	310	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
1,3-Dichlorobenzene +	570	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
1,4-Dichlorobenzene	340	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
3,3'-Dichlorobenzidine		0.79 U	1.1 U	0.82 U	0.78 U	0.75 U
2,4-Dichlorophenol		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Diethyl phthalate	2,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Dimethyl phthalate +	1,300	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Di-n-butyl phthalate	2,300	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2,4-Dimethylphenol		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4,6-Dinitro-2-methylphenol		1.9 U	2.6 U	2 U	1.9 U	1.8 U
2,4-Dinitrophenol		1.9 U	2.6 U	2 U	1.9 U	1.8 U
2,4-Dinitrotoluene		0.2 U	0.28 U	0.21 U	0.2 U	0.19 U
2,6-Dinitrotoluene		0.2 U	0.28 U	0.21 U	0.2 U	0.19 U
Di-n-octyl phthalate	10,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Hexachlorobenzene	2.6	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Hexachlorobutadiene +	180	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Hexachlorocyclopentadiene	1.1	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Hexachloroethane		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Isophorone	4,600	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2-Methylnaphthalene		0.39 U	3.8	0.41 U	0.39 U	0.38 U
2-Methylphenol		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
4-Methylphenol		0.39 U	2.2	0.41 U	0.39 U	0.38 U
2-Nitroaniline +	7.5	1.9 U	2.6 U	2 U	1.9 U	1.8 U
3-Nitroaniline		1.9 U	2.6 U	2 U	1.9 U	1.8 U
4-Nitroaniline Nitrobenzene	9.4	1.9 U 0.2 U	2.6 U 0.28 U	2 U	1.9 U 0.2 U	1.8 U
2-Nitrophenol	9.4	0.2 U 0.39 U	0.28 U 0.54 U	0.21 U 0.41 U	0.2 U 0.39 U	0.19 U 0.38 U
4-Nitrophenol		1.9 U	2.6 U	0.41 U	1.9 U	1.8 U
N-Nitrosodi-n-propylamine		0.2 U	0.28 U	0.21 U	0.2 U	0.19 U
N-Nitrosodi-n-propylamine N-Nitrosodiphenylamine		0.2 U	0.28 U	0.21 U	0.2 U	0.19 U
2, 2'-Oxybis(1-Chloropropane)		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
Pentachlorophenol		1.9 U	2.6 U	0.41 U	1.9 U	1.8 U
Phenol		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
1,2,4-Trichlorobenzene	920	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U
2,4,5-Trichlorophenol	920	0.39 U	1.1 U	0.41 U	0.39 U	0.75 U
2,4,6-Trichlorophenol	540	0.79 U	0.54 U	0.82 U	0.78 U	0.73 U
NOTES:	540	0.37 U	0.34 U	U.41 U	0.37 0	0.50 0

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- $(4)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (5) + Screening level obtained from Table B: Soil Remediation Objectives for Industrial/Commercial Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 5 (Continued) Tier 1 Screening: Soil Inhalation Exposure Route

Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18
		PAHs	(mg/kg)			
Acenaphthene		0.03 U	4.3	0.072	0.029 U	0.028 U
Acenaphthylene		0.03 U	0.45	0.031 U	0.029 U	0.028 U
Anthracene		0.03 U	11	0.079	0.029 U	0.028 U
Benzo(a)anthracene		0.03 U	14	0.065	0.029 U	0.028 U
Benzo(b)fluoranthene		0.03 U	8.5	0.038	0.029 U	0.028 U
Benzo(k)fluoranthene		0.03 U	9.8	0.038	0.029 U	0.028 U
Benzo(g,h,i)perylene		0.03 U	3.2	0.031 U	0.029 U	0.028 U
Benzo(a)pyrene		0.03 U	12	0.059	0.029 U	0.028 U
Chrysene		0.037	12	0.061	0.029	0.028 U
Dibenzo(a,h)anthracene		0.03 U	1.6	0.031 U	0.029 U	0.028 U
Fluoranthene		0.056	27	0.14	0.029	0.028 U
Fluorene		0.03 U	6.2	0.088	0.029 U	0.028 U
Indeno(1,2,3-cd)pyrene		0.03 U	3.8	0.031 U	0.029 U	0.028 U
Naphthalene	1.8	0.054	4	0.39	0.087	0.028 U
Phenanthrene		0.11	27	0.24	0.089	0.075
Pyrene		0.057	23	0.11	0.05	0.028 U
		PCBs	(mg/kg)			
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA
	Priority	Pollutant Metals	and Total Cyanide	(mg/kg)		
Antimony		NA	NA	NA	NA	NA
Arsenic	25,000	NA	NA	NA	NA	NA
Barium	870,000	NA	NA	NA	NA	NA
Beryllium	44,000	NA	NA	NA	NA	NA
Cadmium	59,000	NA	NA	NA	NA	NA
Chromium	690	NA	NA	NA	NA	NA
Copper		NA	NA	NA	NA	NA
Lead		NA	NA	NA	NA	NA
Mercury	52,000	NA	NA	NA	NA	NA
Nickel	440,000	NA	NA	NA	NA	NA
Selenium		NA	NA	NA	NA	NA
Silver		NA	NA	NA	NA	NA
Thallium		NA	NA	NA	NA	NA
Zinc		NA	NA	NA	NA	NA
Total Cyanide		NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.

 (2) PAHs Polynuclear Aromatic Hydrocarbons.

 (3) -- Toxicity criteria not available for exposure route.

 (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) NA Not analyzed.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Table 6
Tier 1 Screening: Soil Migration to Groundwater Route (Class II)
The Former Willow Street Station Manufactured Gas Plant Site,
1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	ınd surface)/Conce	entration
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3
		TCL Volat	iles (mg/kg)			
Acetone	16	0.099	0.041 U	0.17	0.091	0.051
Benzene	0.17	0.0097 U	0.0082 U	0.055	0.015	0.0072 U
Bromodichloromethane	0.6	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Bromoform	0.8	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Bromomethane	1.2	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
2-Butanone		0.019 U	0.016 U	0.024 U	0.02	0.014 U
Carbon Disulfide	160	0.0097 U	0.0082 U	0.023	0.0081 U	0.0072 U
Carbon Tetrachloride	0.33	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chlorobenzene	6.5	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chloroethane +	70	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
Chloroform	2.9	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Chloromethane +	0.68	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Dibromochloromethane	0.4	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1-Dichloroethane	110	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,2-Dichloroethane	0.1	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1-Dichloroethene	0.3	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
cis-1,2-Dichloroethene	1.1	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
trans-1,2-Dichloroethene	3.4	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,2-Dichloropropane	0.15	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
cis-1,3-Dichloropropene	0.02	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
trans-1,3-Dichloropropene	0.02	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Ethylbenzene	19	0.0097 U	0.0082 U	0.044	0.049	0.0072 U
2-Hexanone +	1.3	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
4-Methyl-2-Pentanone		0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
Methylene Chloride	0.2	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1,2,2-Tetrachloroethane +	3.3	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Tetrachloroethene	0.3	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Toluene	29	0.0097 U	0.0082 U	0.036	0.0081 U	0.0072 U
1,1,1-Trichloroethane	9.6	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
1,1,2-Trichloroethane	0.3	0.0097 U	0.0082 U	0.012 U	0.0081 U	0.0072 U
Trichloroethene	0.3	0.0097 U	0.0082 U	0.021	0.0081 U	0.0072 U
Vinyl Chloride	0.07	0.019 U	0.016 U	0.024 U	0.016 U	0.014 U
m,p-Xylene*	150	0.0097 U	0.0082 U	0.028	0.0081 U	0.0072 U
o-Xylene*	150	0.0097 U	0.0082 U	0.025	0.012	0.0096
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	T (C C C C C C C C C C C C C C C C C C							
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001			
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3			
		TCL Semivol	atiles (mg/kg)						
Bis(2-chloroethoxy)methane		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
Bis(2-chloroethyl)ether**	0.0004	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
Bis(2-ethylhexyl)phthalate	31,000	0.37 U	0.45	0.37 U	0.38 U	0.49			
4-Bromophenyl phenyl ether		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
Butyl benzyl phthalate	930	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
Carbazole	2.8	0.37 U	0.38 U	0.52	0.47	2.9			
4-Chloro-3-methylphenol +	120	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
4-Chloroaniline	0.7	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
2-Chloronaphthalene		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
2-Chlorophenol	1.5	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
4-Chlorophenyl phenyl ether		0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
Dibenzofuran +	76	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
1,2-Dichlorobenzene	43	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
1,3-Dichlorobenzene +	1.0	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
1,4-Dichlorobenzene	11	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
3,3'-Dichlorobenzidine**	0.033	0.74 U	0.76 U	0.75 U	0.75 U	0.71 U			
2,4-Dichlorophenol	0.48	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
Diethyl phthalate	470	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
Dimethyl phthalate +	380	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
Di-n-butyl phthalate	2,300	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
2,4-Dimethylphenol	9	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
4,6-Dinitro-2-methylphenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U			
2,4-Dinitrophenol**	0.2	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U			
2,4-Dinitrotoluene**	0.0008	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
2,6-Dinitrotoluene**	0.0007	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
Di-n-octyl phthalate	10,000	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
Hexachlorobenzene	11	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
Hexachlorobutadiene +	15	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
Hexachlorocyclopentadiene	2,200	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
Hexachloroethane	2.6	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
Isophorone	8	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
2-Methylnaphthalene +	39	0.37 U	0.38 U	0.85	0.38 U	0.57			
2-Methylphenol	15	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
4-Methylphenol ++	0.66	0.37 U	0.38 U	0.56	0.38 U	0.36 U			
2-Nitroaniline		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U			
3-Nitroaniline		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U			
4-Nitroaniline		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U			
Nitrobenzene**	0.1	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
2-Nitrophenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U			
4-Nitrophenol		1.8 U	1.8 U	1.8 U	1.8 U	1.7 U			
N-Nitrosodi-n-propylamine**	0.00005	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
N-Nitrosodiphenylamine	5.6	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.016 U	0.016 U	0.015 U			
Pentachlorophenol**	0.10	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U			
Phenol	100	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
1,2,4-Trichlorobenzene	53	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			
2,4,5-Trichlorophenol	26	0.74 U	0.76 U	0.75 U	0.75 U	0.71 U			
2,4,6-Trichlorophenol **	0.07	0.37 U	0.38 U	0.37 U	0.38 U	0.36 U			

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (7) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (8) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample 1	Location and Dept	h (feet below grou	nd surface)/Conce	entration
	Screening	SB01-001	SB01-002	SP02-001	SP02-002	SP03-001
Compound/Analyte	Level (mg/kg)	1-2	8-10	2-3	3-4	2-3
		PAHs ((mg/kg)			
Acenaphthene	2,900	0.037	0.029 U	0.45	0.19	0.69
Acenaphthylene +	120	0.032	0.029 U	1.2	0.13	0.32
Anthracene	59,000	0.27	0.16	1.5	0.3	0.75
Benzo(a)anthracene	8	0.34	0.34	3.5	0.43	2.5
Benzo(b)fluoranthene	25	0.44	0.32	2.2	0.36	1.8
Benzo(k)fluoranthene	250	0.44	0.26	2.7	0.39	1.6
Benzo(g,h,i)perylene +	160,000	0.31	0.23	2	0.48	0.94
Benzo(a)pyrene	82	0.32	0.21	3.1	0.52	2.3
Chrysene	800	0.71	0.67	4.1	0.62	2.5
Dibenzo(a,h)anthracene	7.6	0.16	0.099	0.81	0.13	0.39
Fluoranthene	21,000	1.4	1.1	6.2	0.85	4.1
Fluorene	2,800	0.067	0.029 U	0.63	0.21	0.65
Indeno(1,2,3-cd)pyrene	69	0.31	0.2	2	0.35	0.93
Naphthalene	18	0.36	0.044	0.84	0.28	0.75
Phenanthrene +	1,100	0.64	0.35	3.8	1	3.7
Pyrene	21,000	1.5	1.2	8.6	1.1	4.5
		PCBs (
Aroclor 1016		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1221		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1232		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1242		0.09 U	0.093 U	0.094	0.09 U	0.4
Aroclor 1248		0.09 U	0.093 U	0.09 U	0.09 U	0.084 U
Aroclor 1254		0.18 U	0.19 U	0.18 U	0.18 U	0.33
Aroclor 1260		0.18 U	0.19 U	0.18 U	0.18 U	0.16 U
Total PCBs		0.810 U	0.845 U	0.814	0.810 U	1.226
	1	Pollutant Metals a		· · · · · · · · · · · · · · · · · · ·		
Antimony*	20	0.97 UJ	1 UJ	1 UJ	1 UJ	1.1 UJ
Arsenic*	120	8.1	9.2 J	6.5	2.5 J	7.2
Barium*	1,800	61 J	47 J	82 J	19 J	68 J
Beryllium*	130,000	0.75	0.87	1.1	0.63	1
Cadmium*	590	0.91	0.54	0.79	0.52 U	1.1
Chromium ***	21	14 J	20 J	15 J	6.9 J	20 J
Copper*	330,000	66 J	32 J	43 J	8.9 J	110 J
Lead**		380 J	41	130 J	31	150 J
Mercury*	32	0.35	0.28	0.15	0.035	0.076
Nickel*	14,000	17 J	33 J	20 J	5.5 J	23 Ј
Selenium*	1.3	0.97 U	1 U	1 U	1 U	1.1 U
Silver ***	39	0.97 U	1 U	1 U	1 U	1.1 U
Thallium*	34	0.97 U	4.2	1	1 U	1.1 U
Zinc*	32,000	160 J	70 J	90 J	23 J	290 J
Total Cyanide*	120	0.31 U	0.27 U	0.26 U	0.26 U	0.23 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3) \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- (7) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used.
- (8) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (9) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- (10) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (11) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001
Compound/Analyte	Level (mg/kg)	4-5	5-7	2-3	9-10	2-3
		TCL Volat	iles (mg/kg)			
Acetone	16	0.32	0.061 U	0.067	0.061	0.073
Benzene	0.17	0.017 U	0.012 U	0.015	0.012 U	0.079
Bromodichloromethane	0.6	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Bromoform	0.8	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Bromomethane	1.2	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
2-Butanone		0.072	0.025 U	0.024 U	0.023 U	0.025 U
Carbon Disulfide	160	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Carbon Tetrachloride	0.33	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chlorobenzene	6.5	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chloroethane +	70	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Chloroform	2.9	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Chloromethane +	0.68	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Dibromochloromethane	0.4	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1-Dichloroethane	110	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,2-Dichloroethane	0.1	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1-Dichloroethene	0.3	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
cis-1,2-Dichloroethene	1.1	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
trans-1,2-Dichloroethene	3.4	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,2-Dichloropropane	0.15	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
cis-1,3-Dichloropropene	0.02	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
trans-1,3-Dichloropropene	0.02	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Ethylbenzene	19	0.017 U	0.012 U	0.012 U	0.012 U	0.15
2-Hexanone +	1.3	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
4-Methyl-2-Pentanone		0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Methylene Chloride	0.2	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1,2,2-Tetrachloroethane +	3.3	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Tetrachloroethene	0.3	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Toluene	29	0.017 U	0.012 U	0.012 U	0.012 U	0.041
1,1,1-Trichloroethane	9.6	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
1,1,2-Trichloroethane	0.3	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Trichloroethene	0.3	0.017 U	0.012 U	0.012 U	0.012 U	0.013 U
Vinyl Chloride	0.07	0.034 U	0.025 U	0.024 U	0.023 U	0.025 U
m,p-Xylene*	150	0.017 U	0.012 U	0.012 U	0.012 U	0.11
o-Xylene*	150	0.017 U	0.012 U	0.012 U	0.012 U	0.12
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou		
	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001
Compound/Analyte	Level (mg/kg)	4-5	5-7	2-3	9-10	2-3
		TCL Semivol	atiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Bis(2-chloroethyl)ether**	0.0004	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Bis(2-ethylhexyl)phthalate	31,000	0.44 U	1.1	0.38 U	0.39 U	0.38 U
4-Bromophenyl phenyl ether		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Butyl benzyl phthalate	930	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Carbazole	2.8	0.44 U	0.41 U	0.67	0.39 U	2.2
4-Chloro-3-methylphenol +	120	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4-Chloroaniline	0.7	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Chloronaphthalene		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Chlorophenol	1.5	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4-Chlorophenyl phenyl ether		0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Dibenzofuran +	76	0.44 U	0.41 U	0.38 U	0.39 U	0.4
1,2-Dichlorobenzene	43	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
1,3-Dichlorobenzene +	1.0	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
1,4-Dichlorobenzene	11	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
3,3´-Dichlorobenzidine**	0.033	0.89 U	0.82 U	0.76 U	0.78 U	0.76 U
2,4-Dichlorophenol	0.48	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Diethyl phthalate	470	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Dimethyl phthalate +	380	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Di-n-butyl phthalate	2,300	0.44 U	0.45	0.38 U	0.39 U	0.38 U
2,4-Dimethylphenol	9	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4,6-Dinitro-2-methylphenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
2,4-Dinitrophenol**	0.2	2.1 U	2 U	1.8 U	1.9 U	1.8 U
2,4-Dinitrotoluene**	0.0008	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2,6-Dinitrotoluene**	0.0007	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Di-n-octyl phthalate	10,000	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachlorobenzene	11	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachlorobutadiene +	15	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachlorocyclopentadiene	2,200	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Hexachloroethane	2.6	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
Isophorone	8	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Methylnaphthalene +	39	0.44 U	0.41 U	0.54	0.39 U	2.7
2-Methylphenol	15	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
4-Methylphenol ++	0.66	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Nitroaniline		2.1 U	2 U	1.8 U	1.9 U	1.8 U
3-Nitroaniline		2.1 U	2 U	1.8 U	1.9 U	1.8 U
4-Nitroaniline		2.1 U	2 U	1.8 U	1.9 U	1.8 U
Nitrobenzene**	0.1	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2-Nitrophenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
4-Nitrophenol		2.1 U	2 U	1.8 U	1.9 U	1.8 U
N-Nitrosodi-n-propylamine**	0.00005	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
N-Nitrosodiphenylamine	5.6	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2, 2'-Oxybis(1-Chloropropane)		0.019 U	0.017 U	0.016 U	0.017 U	0.016 U
Pentachlorophenol**	0.10	2.1 U	2 U	1.8 U	1.9 U	1.8 U
Phenol	100	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
1,2,4-Trichlorobenzene	53	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U
2,4,5-Trichlorophenol	26	0.89 U	0.82 U	0.76 U	0.78 U	0.76 U
2,4,6-Trichlorophenol **	0.07	0.44 U	0.41 U	0.38 U	0.39 U	0.38 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier I evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration								
	Tier 1			, ,				
	Screening	SP03-002	SB04-001	SP05-001	SP05-002	SP06-001		
Compound/Analyte	Level (mg/kg)	4-5	5-7	2-3	9-10	2-3		
		PAHs (mg/kg)						
Acenaphthene	2,900	0.034 U	0.17	0.84	0.03 U	1.4		
Acenaphthylene +	120	0.034 U	0.13	1.3	0.03 U	0.59		
Anthracene	59,000	0.034 U	0.7	1.1	0.03 U	1.7		
Benzo(a)anthracene	8	0.034 U	0.78	3	0.03 U	3.3		
Benzo(b)fluoranthene	25	0.034 U	1.1	1.9	0.03 U	2		
Benzo(k)fluoranthene	250	0.034 U	0.91	2.5	0.03 U	2.4		
Benzo(g,h,i)perylene +	160,000	0.034 U	1.2	1.2	0.03 U	1.4		
Benzo(a)pyrene	82	0.034 U	0.75	3.3	0.03 U	3.3		
Chrysene	800	0.034 U	1.7	3.5	0.03 U	4.2		
Dibenzo(a,h)anthracene	7.6	0.034 U	0.41	0.55	0.03 U	0.71		
Fluoranthene	21,000	0.034 U	2.4	4.3	0.03 U	7.2		
Fluorene	2,800	0.034 U	0.31	0.77	0.03 U	1.5		
Indeno(1,2,3-cd)pyrene	69	0.034 U	0.74	1.3	0.03 U	1.6		
Naphthalene	18	0.034 U	0.15	0.22	0.03 U	4.2		
Phenanthrene +	1,100	0.034 U	1.5	2.9	0.03 U	7		
Pyrene	21,000	0.034 U	3.4	6.6	0.03 U	6.1		
		PCBs (mg/kg)						
Aroclor 1016		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U		
Aroclor 1221		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U		
Aroclor 1232		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U		
Aroclor 1242		0.1 U	5.8	0.092 U	0.095 U	0.29		
Aroclor 1248		0.1 U	0.096 U	0.092 U	0.095 U	0.092 U		
Aroclor 1254		0.2 U	3.4	0.19 U	0.19 U	0.29		
Aroclor 1260		0.2 U	0.19 U	0.19 U	0.19 U	0.18 U		
Total PCBs		0.900 U	9.774	0.840 U	0.855 U	1.128		
	Priority	Pollutant Metals	and Total Cyanide	(mg/kg)				
Antimony*	20	1.2 UJ	1.4 J	1.1 UJ	1.1 UJ	1.1 UJ		
Arsenic*	120	3.6 J	8.1 J	9	5.8 J	7.3		
Barium*	1,800	58 J	260 J	78 J	18 J	160 J		
Beryllium*	130,000	1.3	0.72	1.1	0.97	0.95		
Cadmium*	590	0.6 U	3	1.1	0.55 U	1.2		
Chromium ***	21	20 J	570 J ⁺⁺	14 J	15 J	13 J		
Copper*	330,000	18 J	220 J	140 J	19 J	35 J		
Lead**		17	280	160 J	13	450 J		
Mercury*	32	0.031 U	0.31	0.32	0.027 U	0.22		
Nickel*	14,000	24 J	76 J	20 J	23 J	17 J		
Selenium*	1.3	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U		
Silver ***	39	1.2 U	1.3	1.1 U	1.1 U	1.1 U		
Thallium*	34	1.2	1.2 U	1.1 U	1.5	1.1 U		
Zinc*	32,000	63 J	780 J	240 J	37 J	320 J		
Total Cyanide*	120	0.31 U	0.33 U	0.27 U	0.31 U	0.25 U		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3) \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used.
- (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (10) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- (11) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (12) ++ SPLP analysis was conducted on sample SB04-001 with a total chromium concentration of 570 mg/kg. The SPLP chromuim result for SB04-001 was non-detect; therefore the result is below the Tier I Class II screening level of 1.0 mg/l.
- (13) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	ınd surface)/Conce	entration
	Screening	SP06-002	SP06-003	SP07-001	SP07-002	SP07-003
Compound/Analyte	Level (mg/kg)	3-4	8-10	1-2	9-10	16-17
		TCL Volat	iles (mg/kg)			
Acetone	16	0.16	0.092 U	0.06 U	0.068 U	0.046 U
Benzene	0.17	0.78	0.056	0.012 U	0.014 U	0.0093 U
Bromodichloromethane	0.6	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Bromoform	0.8	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Bromomethane	1.2	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
2-Butanone		0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Carbon Disulfide	160	0.025 U	0.018 U	0.04	0.014 U	0.0093 U
Carbon Tetrachloride	0.33	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Chlorobenzene	6.5	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Chloroethane +	70	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Chloroform	2.9	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Chloromethane +	0.68	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Dibromochloromethane	0.4	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1-Dichloroethane	110	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,2-Dichloroethane	0.1	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1-Dichloroethene	0.3	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
cis-1,2-Dichloroethene	1.1	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
trans-1,2-Dichloroethene	3.4	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,2-Dichloropropane	0.15	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
cis-1,3-Dichloropropene	0.02	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
trans-1,3-Dichloropropene	0.02	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Ethylbenzene	19	3	0.38	0.013	0.014 U	0.0093 U
2-Hexanone +	1.3	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
4-Methyl-2-Pentanone		0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Methylene Chloride	0.2	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1,2,2-Tetrachloroethane +	3.3	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Tetrachloroethene	0.3	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Toluene	29	0.79	0.044	0.012	0.014 U	0.0093 U
1,1,1-Trichloroethane	9.6	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
1,1,2-Trichloroethane	0.3	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Trichloroethene	0.3	0.025 U	0.018 U	0.012 U	0.014 U	0.0093 U
Vinyl Chloride	0.07	0.05 U	0.037 U	0.024 U	0.027 U	0.019 U
m,p-Xylene*	150	3	0.098	0.016	0.014 U	0.0093 U
o-Xylene*	150	2	0.17	0.012 U	0.014 U	0.0093 U
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.(3) Shaded value exceeds Tier 1 screening level.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1				nd surface)/Conce	
	Screening	SP06-002	SP06-003	SP07-001	SP07-002	SP07-003
Compound/Analyte	Level (mg/kg)	3-4	8-10	1-2	9-10	16-17
		TCL Semivol	atiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Bis(2-chloroethyl)ether**	0.0004	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4-Bromophenyl phenyl ether		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Butyl benzyl phthalate	930	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Carbazole	2.8	0.39 U	1.4	0.47	0.38 U	0.39 U
4-Chloro-3-methylphenol +	120	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4-Chloroaniline **	0.7	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Chloronaphthalene		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Chlorophenol	1.5	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4-Chlorophenyl phenyl ether		0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Dibenzofuran +	76	1.3	1.6	0.37 U	0.38 U	0.39 U
1,2-Dichlorobenzene	43	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
1,3-Dichlorobenzene + **	1.0	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
1,4-Dichlorobenzene	11	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
3,3´-Dichlorobenzidine**	0.033	0.78 U	2.2 U	0.74 U	0.76 U	0.79 U
2,4-Dichlorophenol	0.48	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Diethyl phthalate	470	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Dimethyl phthalate +	380	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Di-n-butyl phthalate	2,300	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2,4-Dimethylphenol	9	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4,6-Dinitro-2-methylphenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
2,4-Dinitrophenol**	0.2	1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
2,4-Dinitrotoluene**	0.0008	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2,6-Dinitrotoluene**	0.0007	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Di-n-octyl phthalate	10,000	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Hexachlorobenzene	11	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Hexachlorobutadiene +	15	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Hexachlorocyclopentadiene	2,200	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Hexachloroethane	2.6	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
Isophorone	8	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Methylnaphthalene +	39	20	17	0.4	0.38 U	0.39 U
2-Methylphenol	15	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
4-Methylphenol ++	0.66	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Nitroaniline		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
3-Nitroaniline		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
4-Nitroaniline		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
Nitrobenzene**	0.1	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2-Nitrophenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
4-Nitrophenol		1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
N-Nitrosodi-n-propylamine**	0.00005	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
N-Nitrosodiphenylamine	5.6	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.046 U	0.016 U	0.016 U	0.017 U
Pentachlorophenol**	0.10	1.9 U	5.2 U	1.8 U	1.9 U	1.9 U
Phenol	100	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
1,2,4-Trichlorobenzene	53	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U
2,4,5-Trichlorophenol	26	0.78 U	2.2 U	0.74 U	0.76 U	0.79 U
2,4,6-Trichlorophenol **	0.07	0.39 U	1.1 U	0.37 U	0.38 U	0.39 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) **Values exceeded TACO or non-TACO screening level but were consistently non-detect so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample l	Location and Dept	h (feet below grou	nd surface)/Conce	entration		
	Screening	SP06-002	SP06-003	SP07-001	SP07-002	SP07-003		
Compound/Analyte	Level (mg/kg)	3-4	8-10	1-2	9-10	16-17		
		PAHs (mg/kg)					
Acenaphthene	2,900	10	4.5	0.28 U	0.029 U	0.03 U		
Acenaphthylene +	120	2	4.2	0.39	0.029 U	0.03 U		
Anthracene	59,000	9.6	4.9	0.54	0.029 U	0.03 U		
Benzo(a)anthracene	8	3.9	4.2	1.5	0.029 U	0.03 U		
Benzo(b)fluoranthene	25	1.1	1.3	1.3	0.029 U	0.03 U		
Benzo(k)fluoranthene	250	0.89	1.1	0.98	0.029 U	0.03 U		
Benzo(g,h,i)perylene +	160,000	1.2	0.82 U	0.77	0.029 U	0.03 U		
Benzo(a)pyrene	82	2.7	0.97	1.6	0.029 U	0.03 U		
Chrysene	800	5.1	4.3	1.6	0.029 U	0.03 U		
Dibenzo(a,h)anthracene	7.6	0.52	0.82 U	0.28 U	0.029 U	0.03 U		
Fluoranthene	21,000	9.1	6.8	2.5	0.029 U	0.03 U		
Fluorene	2,800	10	6.5	0.28 U	0.029 U	0.03 U		
Indeno(1,2,3-cd)pyrene	69	1.2	0.82 U	0.71	0.029 U	0.03 U		
Naphthalene	18	27	13	0.28	0.029 U	0.03 U		
Phenanthrene +	1,100	34	21	2.1	0.029 U	0.03 U		
Pyrene	21,000	15	10	2.8	0.029 U	0.03 U		
PCBs (mg/kg)								
Aroclor 1016		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U		
Aroclor 1221		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U		
Aroclor 1232		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U		
Aroclor 1242		0.094 U	0.09 U	1.5	0.09 U	0.096 U		
Aroclor 1248		0.094 U	0.09 U	0.091 U	0.09 U	0.096 U		
Aroclor 1254		0.19 U	0.18 U	0.91 U	0.18 U	0.19 U		
Aroclor 1260		0.19 U	0.18 U	0.18 U	0.18 U	0.19 U		
Total PCBs		0.850 U	0.810 U	2.954	0.810 U	0.860 U		
	· · · · · · ·	Pollutant Metals a	-	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
Antimony*	20	1.1 UJ	NA	1 UJ	1.1 UJ	1.1 UJ		
Arsenic*	120	6.5 J	NA	4.4	7.7 J	8.1 J		
Barium*	1,800	67 J	NA	370 J	38 J	98 J		
Beryllium*	130,000	1	NA	5.7	0.98	1.2		
Cadmium*	590	0.98	NA	1.4	0.54 U	0.57 U		
Chromium ***	21	12 J	NA	120 J	17 J	21 J		
Copper*	330,000	71 J	NA	400 J	28 J	24 J		
Lead**		190	NA	180 J	55	16		
Mercury*	32	0.15	NA	0.091	0.029 U	0.032 U		
Nickel*	14,000	17 J	NA	17 J	33 J	31 J		
Selenium*	1.3	1.1 U	NA	2.8	1.1 U	1.1 U		
Silver ***	39	1.1 U	NA	1 U	1.1 U	1.1 U		
Thallium*	34	1.1 U	NA	1 U	1.4	2.1		
Zinc*	32,000	190 J	NA	180 J	69 J	39 J		
Total Cyanide*	120	0.26 U	NA	0.26 U	0.27 U	0.29 U		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used.
- (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (10) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- (11) NA Not analyzed.
- (12) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (13) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	und surface)/Conce	entration
	Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002
Compound/Analyte	Level (mg/kg)	0-0.5	7-8	3-5	1-2	6-7
		TCL Volat	iles (mg/kg)			
Acetone	16	0.047 U	0.097	0.12	0.062	0.071 U
Benzene	0.17	0.0095 U	0.011 U	0.19	0.0092	3.6
Bromodichloromethane	0.6	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Bromoform	0.8	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Bromomethane	1.2	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
2-Butanone		0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Carbon Disulfide	160	0.0095 U	0.011 U	0.013	0.0074 U	0.014 U
Carbon Tetrachloride	0.33	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chlorobenzene	6.5	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chloroethane +	70	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Chloroform	2.9	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Chloromethane +	0.68	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Dibromochloromethane	0.4	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1-Dichloroethane	110	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,2-Dichloroethane	0.1	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1-Dichloroethene	0.3	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
cis-1,2-Dichloroethene	1.1	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
trans-1,2-Dichloroethene	3.4	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,2-Dichloropropane	0.15	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
cis-1,3-Dichloropropene	0.02	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
trans-1,3-Dichloropropene	0.02	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Ethylbenzene	19	0.0095 U	0.011 U	0.07	0.014	8.2
2-Hexanone +	1.3	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
4-Methyl-2-Pentanone		0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Methylene Chloride	0.2	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1,2,2-Tetrachloroethane +	3.3	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Tetrachloroethene	0.3	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Toluene	29	0.0095 U	0.011 U	0.011 U	0.0087	0.014 U
1,1,1-Trichloroethane	9.6	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
1,1,2-Trichloroethane	0.3	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Trichloroethene	0.3	0.0095 U	0.011 U	0.011 U	0.0074 U	0.014 U
Vinyl Chloride	0.07	0.019 U	0.022 U	0.022 U	0.015 U	0.028 U
m,p-Xylene*	150	0.0095 U	0.011 U	0.013	0.021	5
o-Xylene*	150	0.0095 U	0.011 U	0.087	0.014	1.4
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
 (3) Shaded value exceeds Tier 1 screening
- (3) Shaded value exceeds Tier 1 screening level.
- $(4)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (5) Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1				nd surface)/Conce	
	Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002
Compound/Analyte	Level (mg/kg)	0-0.5	7-8	3-5	1-2	6-7
		TCL Semivol	atiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Bis(2-chloroethyl)ether**	0.0004	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Bis(2-ethylhexyl)phthalate	31,000	2.9	0.4 U	0.75	2.1	0.39 U
4-Bromophenyl phenyl ether		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Butyl benzyl phthalate	930	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Carbazole	2.8	0.41 U	0.4 U	3.7	1.1	0.39 U
4-Chloro-3-methylphenol +	120	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
4-Chloroaniline	0.7	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2-Chloronaphthalene		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2-Chlorophenol	1.5	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
4-Chlorophenyl phenyl ether		0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Dibenzofuran +	76	0.41 U	0.4 U	0.65	2	1.2
1,2-Dichlorobenzene	43	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
1,3-Dichlorobenzene +	1.0	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
1,4-Dichlorobenzene	11	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
3,3´-Dichlorobenzidine**	0.033	0.81 U	0.8 U	0.75 U	0.72 U	0.77 U
2,4-Dichlorophenol	0.48	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Diethyl phthalate	470	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Dimethyl phthalate +	380	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Di-n-butyl phthalate	2,300	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2,4-Dimethylphenol	9	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U
2,4-Dinitrophenol**	0.2	2 U	1.9 U	1.8 U	1.8 U	1.9 U
2,4-Dinitrotoluene**	0.0008	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2,6-Dinitrotoluene**	0.0007	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Di-n-octyl phthalate	10,000	0.71	0.4 U	0.37 U	0.36 U	0.39 U
Hexachlorobenzene	11	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Hexachlorobutadiene +	15	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Hexachlorocyclopentadiene	2,200	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Hexachloroethane	2.6	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
Isophorone	8	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2-Methylnaphthalene +	39	0.41 U	0.4 U	0.37 U	27	23
2-Methylphenol	15	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
4-Methylphenol ++	0.66	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2-Nitroaniline		2 U	1.9 U	1.8 U	1.8 U	1.9 U
3-Nitroaniline		2 U	1.9 U	1.8 U	1.8 U	1.9 U
4-Nitroaniline		2 U	1.9 U	1.8 U	1.8 U	1.9 U
Nitrobenzene**	0.1	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2-Nitrophenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U
4-Nitrophenol		2 U	1.9 U	1.8 U	1.8 U	1.9 U
N-Nitrosodi-n-propylamine**	0.00005	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
N-Nitrosodiphenylamine	5.6	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.017 U	0.016 U	0.015 U	0.016 U
Pentachlorophenol**	0.10	2 U	1.9 U	1.8 U	1.8 U	1.9 U
Phenol	100	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
1,2,4-Trichlorobenzene	53	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U
2,4,5-Trichlorophenol	26	0.81 U	0.8 U	0.75 U	0.72 U	0.77 U
2,4,6-Trichlorophenol **	0.07	0.41 U	0.4 U	0.37 U	0.36 U	0.39 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (7) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (8) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample 1	Location and Dept	h (feet below grou	ind surface)/Conce	entration		
	Screening	SP08-001	SP08-002	SB09-001	SB10-001	SP10-002		
Compound/Analyte	Level (mg/kg)	0-0.5	7-8	3-5	1-2	6-7		
		PAHs ((mg/kg)					
Acenaphthene	2,900	0.031 U	0.003 U	0.51	2.4	8.6		
Acenaphthylene +	120	0.28	0.0052	0.36	1.9	5.1		
Anthracene	59,000	0.4	0.011	2.3	7.1	8.6		
Benzo(a)anthracene	8	1.4	0.029	3.3	1.6	1.7		
Benzo(b)fluoranthene	25	1.2	0.035	2.3	3.5	2.5		
Benzo(k)fluoranthene	250	0.9	0.027	2.3	3.4	1.7		
Benzo(g,h,i)perylene +	160,000	0.9	0.015	0.74	3.6	1.6		
Benzo(a)pyrene	82	1.7	0.031	1.6	3.9	2.2		
Chrysene	800	1.5	0.035	3.8	9	11		
Dibenzo(a,h)anthracene	7.6	0.33	0.006	0.31	1.2	0.59		
Fluoranthene	21,000	1.7	0.043	5.3	11	6.8		
Fluorene	2,800	0.078	0.0052	0.92	6.9	6.7		
Indeno(1,2,3-cd)pyrene	69	0.83	0.014	0.69	2.6	1.1		
Naphthalene	18	0.041	0.004	0.52	10	18		
Phenanthrene +	1,100	1	0.032	5.2	24	26		
Pyrene	21,000	2.1	0.056	5.1	14	14		
PCBs (mg/kg)								
Aroclor 1016		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U		
Aroclor 1221		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U		
Aroclor 1232		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U		
Aroclor 1242		0.37	0.098 U	0.39	3.9	0.094 U		
Aroclor 1248		0.099 U	0.098 U	0.088 U	0.09 U	0.094 U		
Aroclor 1254		0.28	0.2 U	0.41	3.3	0.19 U		
Aroclor 1260		0.2 U	0.2 U	0.18 U	0.18 U	0.19 U		
Total PCBs		1.246	0.890 U	1.332	7.740	0.850 U		
	1	Pollutant Metals a		· · · · · · · · · · · · · · · · · · ·				
Antimony*	20	1.2 UJ	1.1 UJ	1 UJ	1.1 J	1.1 UJ		
Arsenic*	120	7.2	2.8 J	7.8 J	7.2	13 J		
Barium*	1,800	76 J	31 J	140 J	140 J	80 J		
Beryllium*	130,000	1.1	1.1	0.6	0.84	1.1		
Cadmium*	590	0.75	0.54 U	1.1	1.9	0.55 U		
Chromium ***	21	15 J	18 J	98 J	26 J	18 J		
Copper*	330,000	50 J	22 J	68 J	120 J	32 J		
Lead**		200 J	18	340	260 J	25		
Mercury*	32	1.4	0.033	0.21	0.3	0.027 U		
Nickel*	14,000	19 J	24 J	38 J	25 J	35 J		
Selenium*	1.3	1.2 U	1.1 U	1 U	0.9 U	1.1 U		
Silver ***	39	1.2 U	1.1 U	1 U	0.9 U	1.1 U		
Thallium*	34	1.2 U	1.5	1 U	1.3	2		
Zinc*	32,000	170 J	42 J	240 J	830 J	53 J		
Total Cyanide*	120	0.33 U	0.3 U	0.29 U	0.36	0.31 U		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3) \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used. (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead
- (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (10) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- (11) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SP10-003	SP11-001	SP11-002	SP13-001	SP13-002
Compound/Analyte	Level (mg/kg)	13-14	0-0.5	9-10	1-2	6-7
		TCL Volat	iles (mg/kg)			
Acetone	16	0.053 U	0.057 U	0.078	0.062	0.12
Benzene	0.17	0.92	0.011 U	0.013 U	0.012 U	0.012 U
Bromodichloromethane	0.6	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Bromoform	0.8	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Bromomethane	1.2	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
2-Butanone		0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Carbon Disulfide	160	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Carbon Tetrachloride	0.33	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Chlorobenzene	6.5	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Chloroethane +	70	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Chloroform	2.9	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Chloromethane +	0.68	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Dibromochloromethane	0.4	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1-Dichloroethane	110	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,2-Dichloroethane	0.1	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1-Dichloroethene	0.3	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
cis-1,2-Dichloroethene	1.1	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
trans-1,2-Dichloroethene	3.4	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,2-Dichloropropane	0.15	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
cis-1,3-Dichloropropene	0.02	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
trans-1,3-Dichloropropene	0.02	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Ethylbenzene	19	9	0.011 U	0.013 U	0.012 U	0.012 U
2-Hexanone +	1.3	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
4-Methyl-2-Pentanone		0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Methylene Chloride	0.2	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1,2,2-Tetrachloroethane +	3.3	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Tetrachloroethene	0.3	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Toluene	29	0.6	0.011 U	0.013 U	0.012 U	0.012 U
1,1,1-Trichloroethane	9.6	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
1,1,2-Trichloroethane	0.3	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Trichloroethene	0.3	0.011 U	0.011 U	0.013 U	0.012 U	0.012 U
Vinyl Chloride	0.07	0.021 U	0.023 U	0.026 U	0.025 U	0.023 U
m,p-Xylene*	150	3.8	0.011 U	0.013 U	0.012 U	0.012 U
o-Xylene*	150	12	0.011 U	0.013 U	0.012 U	0.012 U
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.(3) Shaded value exceeds Tier 1 screening level.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	T (
	Screening	SP10-003	SP11-001	SP11-002	SP13-001	SP13-002		
Compound/Analyte	Level (mg/kg)	13-14	0-0.5	9-10	1-2	6-7		
		TCL Semivol	atiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Bis(2-chloroethyl)ether**	0.0004	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Bis(2-ethylhexyl)phthalate	31,000	0.38 U	1.1	0.38 U	0.36 U	0.4 U		
4-Bromophenyl phenyl ether		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Butyl benzyl phthalate	930	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Carbazole	2.8	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
4-Chloro-3-methylphenol +	120	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
4-Chloroaniline	0.7	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2-Chloronaphthalene		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2-Chlorophenol	1.5	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
4-Chlorophenyl phenyl ether		0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Dibenzofuran +	76	0.75	0.38 U	0.38 U	0.36 U	0.4 U		
1,2-Dichlorobenzene	43	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
1,3-Dichlorobenzene +	1.0	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
1,4-Dichlorobenzene	11	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
3,3'-Dichlorobenzidine**	0.033	0.77 U	0.76 U	0.77 U	0.73 U	0.8 U		
2,4-Dichlorophenol	0.48	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Diethyl phthalate	470	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Dimethyl phthalate +	380	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Di-n-butyl phthalate	2,300	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2,4-Dimethylphenol	9	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
4,6-Dinitro-2-methylphenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
2,4-Dinitrophenol**	0.2	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
2,4-Dinitrotoluene**	0.0008	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2,6-Dinitrotoluene**	0.0007	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Di-n-octyl phthalate	10,000	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Hexachlorobenzene	11	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Hexachlorobutadiene +	15	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Hexachlorocyclopentadiene	2,200	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Hexachloroethane	2.6	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
Isophorone	8	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2-Methylnaphthalene +	39	20	1.1	0.42	0.86	0.53		
2-Methylphenol	15	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
4-Methylphenol ++	0.66	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2-Nitroaniline		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
3-Nitroaniline		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
4-Nitroaniline		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
Nitrobenzene**	0.1	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2-Nitrophenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
4-Nitrophenol		1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
N-Nitrosodi-n-propylamine**	0.00005	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
N-Nitrosodiphenylamine	5.6	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.016 U	0.015 U	0.017 U		
Pentachlorophenol**	0.10	1.9 U	1.8 U	1.9 U	1.8 U	1.9 U		
Phenol	100	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
1,2,4-Trichlorobenzene	53	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		
2,4,5-Trichlorophenol	26	0.77 U	0.76 U	0.77 U	0.73 U	0.8 U		
2,4,6-Trichlorophenol **	0.07	0.38 U	0.38 U	0.38 U	0.36 U	0.4 U		

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier I evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Compound/Analyte Acenaphthene	Tier 1 Screening Level (mg/kg)	SP10-003	Location and Dept SP11-001	h (feet below grou SP11-002	nd surface)/Conce SP13-001				
			SP11-001	SP11-002	SP13-001	CD12 002			
	Level (mg/kg)	10 14				SP13-002			
Acenaphthene		13-14	0-0.5	9-10	1-2	6-7			
Acenaphthene	PAHs (mg/kg)								
	2,900	5.5	1.1	0.046	0.16	0.056			
Acenaphthylene +	120	3.7	0.86	0.029 U	0.069	0.03 U			
Anthracene	59,000	3.1	2.5	0.029 U	0.13	0.03 U			
Benzo(a)anthracene	8	0.37	0.9	0.029 U	0.037	0.03 U			
Benzo(b)fluoranthene	25	0.42	1.7	0.029 U	0.13	0.03 U			
Benzo(k)fluoranthene	250	0.49	1.6	0.029 U	0.11	0.03 U			
Benzo(g,h,i)perylene +	160,000	0.51	0.62	0.029 U	0.2	0.03 U			
Benzo(a)pyrene	82	0.45	1.8	0.029 U	0.094	0.03 U			
Chrysene	800	2.2	3.1	0.032	0.26	0.03 U			
Dibenzo(a,h)anthracene	7.6	0.13	0.3	0.029 U	0.084	0.03 U			
Fluoranthene	21,000	1.8	3.7	0.037	0.21	0.03 U			
Fluorene	2,800	3.8	1.3	0.029 U	0.15	0.03 U			
Indeno(1,2,3-cd)pyrene	69	0.26	0.44	0.029 U	0.14	0.03 U			
Naphthalene	18	27	1.5	0.73	0.83	0.99			
Phenanthrene +	1,100	9.3	6.5	0.092	0.34	0.04			
Pyrene	21,000	3	7.8	0.063	0.28	0.03 U			
		PCBs (
Aroclor 1016		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U			
Aroclor 1221		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U			
Aroclor 1232		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U			
Aroclor 1242		0.09 U	0.49	0.094 U	0.98	0.097 U			
Aroclor 1248		0.09 U	0.092 U	0.094 U	0.09 U	0.097 U			
Aroclor 1254		0.18 U	0.45	0.19 U	0.9 U	0.19 U			
Aroclor 1260		0.18 U	0.18 U	0.19 U	0.18 U	0.19 U			
Total PCBs		0.810 U	1.488	0.850 U	2.420	0.865 U			
	Priority	Pollutant Metals a	nd Total Cyanide	(mg/kg)					
Antimony*	20	1.1 UJ	1.1 UJ	1.1 UJ	1 J	1.1 UJ			
Arsenic*	120	7.5 J	5.4	11 J	7.3	9.4 J			
Barium*	1,800	83 J	120 J	100 J	86 J	86 J			
Beryllium*	130,000	1.1	1.1	1.1	0.79	1.2			
Cadmium*	590	0.55 U	1.2	0.56 U	0.7	0.57 U			
Chromium ***	21	19 J	16 J	20 J	14 J	20 J			
Copper*	330,000	31 J	90 J	32 J	40 J	34 J			
Lead**		18	140 J	19	250 J	20			
Mercury*	32	0.028	0.1	0.028 U	2.9	0.03			
Nickel*	14,000	39 J	26 J	37 J	19 J	34 J			
Selenium*	1.3	1.1 U	1.1 U	1.1 U	1 U	1.1 U			
Silver ***	39	1.1 U	1.1 U	1.1 U	1 U	1.1 U			
Thallium*	34	2.5	1.5	2	1.5	2			
Zinc*	32,000	49 J	220 J	47 J	94 J	45 J			
Total Cyanide*	120	0.25 U	0.89	0.27 U	0.26 U	0.3 U			

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used. (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead
- (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (10) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- (11) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SP13-003	SB14-001	SB14-002	SB15-001	SB15-002
Compound/Analyte	Level (mg/kg)	15-16	1-2	6-8	0-0.5	6-8
		TCL Volat	iles (mg/kg)			
Acetone	16	0.055 U	0.051 U	0.078	0.037 U	0.051 U
Benzene	0.17	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromodichloromethane	0.6	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromoform	0.8	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Bromomethane	1.2	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
2-Butanone		0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Carbon Disulfide	160	0.011 U	0.01 U	0.015 U	0.0074 U	0.018
Carbon Tetrachloride	0.33	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chlorobenzene	6.5	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chloroethane +	70	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Chloroform	2.9	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Chloromethane +	0.68	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Dibromochloromethane	0.4	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1-Dichloroethane	110	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,2-Dichloroethane	0.1	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1-Dichloroethene	0.3	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
cis-1,2-Dichloroethene	1.1	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
trans-1,2-Dichloroethene	3.4	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,2-Dichloropropane	0.15	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
cis-1,3-Dichloropropene	0.02	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
trans-1,3-Dichloropropene	0.02	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Ethylbenzene	19	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
2-Hexanone +	1.3	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
4-Methyl-2-Pentanone		0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Methylene Chloride	0.2	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,2,2-Tetrachloroethane +	3.3	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Tetrachloroethene	0.3	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Toluene	29	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,1-Trichloroethane	9.6	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
1,1,2-Trichloroethane	0.3	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Trichloroethene	0.3	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Vinyl Chloride	0.07	0.022 U	0.02 U	0.03 U	0.015 U	0.021 U
m,p-Xylene*	150	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
o-Xylene*	150	0.011 U	0.01 U	0.015 U	0.0074 U	0.01 U
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SP13-003	SB14-001	SB14-002	SB15-001	SB15-002		
Compound/Analyte	Level (mg/kg)	15-16	1-2	6-8	0-0.5	6-8		
		TCL Semivol	latiles (mg/kg)	•	•			
Bis(2-chloroethoxy)methane		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Bis(2-chloroethyl)ether**	0.0004	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	0.49	0.42 U	0.58	0.39 U		
4-Bromophenyl phenyl ether		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Butyl benzyl phthalate	930	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Carbazole	2.8	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
4-Chloro-3-methylphenol +	120	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
4-Chloroaniline	0.7	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2-Chloronaphthalene		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2-Chlorophenol	1.5	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
4-Chlorophenyl phenyl ether		0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Dibenzofuran +	76	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
1,2-Dichlorobenzene	43	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
1,3-Dichlorobenzene +	1.0	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
1,4-Dichlorobenzene	11	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
3,3'-Dichlorobenzidine**	0.033	0.78 U	0.71 U	0.84 U	0.81 U	0.78 U		
2,4-Dichlorophenol	0.48	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Diethyl phthalate	470	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Dimethyl phthalate +	380	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Di-n-butyl phthalate	2,300	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2,4-Dimethylphenol	9	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
4,6-Dinitro-2-methylphenol		1.9 U	1.7 U	2 U	2 U	1.9 U		
2,4-Dinitrophenol**	0.2	1.9 U	1.7 U	2 U	2 U	1.9 U		
2,4-Dinitrotoluene**	0.0008	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2,6-Dinitrotoluene**	0.0007	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Di-n-octyl phthalate	10,000	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Hexachlorobenzene	11	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Hexachlorobutadiene +	15	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Hexachlorocyclopentadiene	2,200	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Hexachloroethane	2.6	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
Isophorone	8	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2-Methylnaphthalene +	39	0.79	0.35 U	0.42 U	0.4 U	0.39 U		
2-Methylphenol	15	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
4-Methylphenol ++	0.66	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2-Nitroaniline		1.9 U	1.7 U	2 U	2 U	1.9 U		
3-Nitroaniline		1.9 U	1.7 U	2 U	2 U	1.9 U		
4-Nitroaniline		1.9 U	1.7 U	2 U	2 U	1.9 U		
Nitrobenzene**	0.1	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2-Nitrophenol		1.9 U	1.7 U	2 U	2 U	1.9 U		
4-Nitrophenol		1.9 U	1.7 U	2 U	2 U	1.9 U		
N-Nitrosodi-n-propylamine**	0.00005	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
N-Nitrosodiphenylamine	5.6	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
2, 2'-Oxybis(1-Chloropropane)	0.10	0.017 U	0.015 U	0.018 U	0.017 U	0.017 U		
Pentachlorophenol**	0.10	1.9 U	1.7 U	2 U	2 U	1.9 U		
Phenol	100	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		
1,2,4-Trichlorobenzene	53 26	0.39 U 0.78 U	0.35 U 0.71 U	0.42 U 0.84 U	0.4 U 0.81 U	0.39 U 0.78 U		
2,4,5-Trichlorophenol								
2,4,6-Trichlorophenol **	0.07	0.39 U	0.35 U	0.42 U	0.4 U	0.39 U		

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier I evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Compound/Analyte	Tier 1	^	Location and Dept	h (feet below grou	ind surface)/Conce	entration
Compound/Analyte	C	Sample Location and Depth (feet below ground surface)/Concentration				
Compound/Analyte	Screening	SP13-003	SB14-001	SB14-002	SB15-001	SB15-002
Compound/I maryte	Level (mg/kg)	15-16	1-2	6-8	0-0.5	6-8
		PAHs ((mg/kg)			
Acenaphthene	2,900	0.077	0.15	0.032 U	0.031 U	0.03 U
Acenaphthylene +	120	0.03 U	0.18	0.032 U	0.13	0.03 U
Anthracene	59,000	0.03 U	0.25	0.032 U	0.031 U	0.03 U
Benzo(a)anthracene	8	0.03 U	3.5	0.032 U	0.15	0.03 U
Benzo(b)fluoranthene	25	0.03 U	1.8	0.032 U	0.13	0.03 U
Benzo(k)fluoranthene	250	0.03 U	1.6	0.032 U	0.13	0.03 U
Benzo(g,h,i)perylene +	160,000	0.03 U	0.66	0.032 U	0.17	0.03 U
Benzo(a)pyrene	82	0.03 U	3	0.032 U	0.2	0.03 U
Chrysene	800	0.03 U	3.2	0.032 U	0.21	0.03 U
Dibenzo(a,h)anthracene	7.6	0.03 U	0.35	0.032 U	0.057	0.03 U
Fluoranthene	21,000	0.03 U	4.2	0.035	0.24	0.087
Fluorene	2,800	0.036	0.15	0.032 U	0.031 U	0.03 U
Indeno(1,2,3-cd)pyrene	69	0.03 U	0.67	0.032 U	0.14	0.03 U
Naphthalene	18	1.1	0.19	0.11	0.031 U	0.051
Phenanthrene +	1,100	0.063	0.3	0.071	0.17	0.083
Pyrene	21,000	0.03 U	11	0.056	0.33	0.13
			(mg/kg)			
Aroclor 1016		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1221		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1232		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1242		0.093 U	0.12	0.1 U	0.22	0.096 U
Aroclor 1248		0.093 U	0.085 U	0.1 U	0.096 U	0.096 U
Aroclor 1254		0.19 U	0.17 U	0.2 U	0.2 U	0.19 U
Aroclor 1260		0.19 U	0.17 U	0.2 U	0.2 U	0.19 U
Total PCBs		0.845 U	0.800	0.900 U	1.004	0.860 U
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony*	20	1 UJ	0.98 UJ	1.1 UJ	1 UJ	1.1 UJ
Arsenic*	120	9.6 J	3.3	15 J	9.3	12 J
Barium*	1,800	74 J	32 J	31 J	150 J	26 J
Beryllium*	130,000	1	0.61	1.2	0.99	1.1
Cadmium*	590	0.66	0.59	0.57 U	2.2	0.57 U
Chromium ***	21	17 J	12 J	19 J	33 J	16 J
Copper*	330,000	34 J	18 J	32 J	120 J	18 J
Lead**		19	85 J	26	340 J	13
Mercury*	32	0.061	0.06	0.031 U	0.23	0.027
Nickel*	14,000	30 J	10 J	43 J	31 J	27 J
Selenium*	1.3	1 U	0.98 U	1.1 U	1 U	1.1 U
Silver ***	39	1 U	0.98 U	1.1 U	1 U	1.1 U
Thallium*	34	1.9	0.98 U	1.2	1	1.1
Zinc*	32,000	42 J	91 J	47 J	550 J	36 J
Total Cyanide*	120	0.26 U	0.28 U	0.32 U	0.32 U	0.27 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3) \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used. (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead
- (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (10) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- (11) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SB15-003	SP16-001	SP16-002	SP16-003	SB17-001
Compound/Analyte	Level (mg/kg)	10-12	2-3	9-10	15-16	1-2
		TCL Volat	iles (mg/kg)			
Acetone	16	0.1	0.053 U	0.1	0.062 U	0.06 U
Benzene	0.17	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromodichloromethane	0.6	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromoform	0.8	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Bromomethane	1.2	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
2-Butanone		0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Carbon Disulfide	160	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Carbon Tetrachloride	0.33	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chlorobenzene	6.5	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chloroethane +	70	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Chloroform	2.9	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Chloromethane +	0.68	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Dibromochloromethane	0.4	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1-Dichloroethane	110	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,2-Dichloroethane	0.1	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1-Dichloroethene	0.3	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
cis-1,2-Dichloroethene	1.1	0.011 U	0.053	0.0098 U	0.012 U	0.012 U
trans-1,2-Dichloroethene	3.4	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,2-Dichloropropane	0.15	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
cis-1,3-Dichloropropene	0.02	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
trans-1,3-Dichloropropene	0.02	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Ethylbenzene	19	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
2-Hexanone +	1.3	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
4-Methyl-2-Pentanone		0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Methylene Chloride	0.2	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,2,2-Tetrachloroethane +	3.3	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Tetrachloroethene	0.3	0.011 U	0.1	0.0098 U	0.012 U	0.012 U
Toluene	29	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,1-Trichloroethane	9.6	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
1,1,2-Trichloroethane	0.3	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Trichloroethene	0.3	0.011 U	0.017	0.0098 U	0.012 U	0.012 U
Vinyl Chloride	0.07	0.022 U	0.021 U	0.02 U	0.025 U	0.024 U
m,p-Xylene*	150	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
o-Xylene*	150	0.011 U	0.011 U	0.0098 U	0.012 U	0.012 U
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou		
	Screening	SB15-003	SP16-001	SP16-002	SP16-003	SB17-001
Compound/Analyte	Level (mg/kg)	10-12	2-3	9-10	15-16	1-2
		TCL Semivol	atiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Bis(2-chloroethyl)ether**	0.0004	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Bis(2-ethylhexyl)phthalate	31,000	0.42 U	1.6	0.39 U	0.39 U	0.94
4-Bromophenyl phenyl ether		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Butyl benzyl phthalate	930	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Carbazole	2.8	0.42 U	0.75	0.39 U	0.39 U	0.36 U
1-Chloro-3-methylphenol +	120	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
1-Chloroaniline	0.7	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2-Chloronaphthalene		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2-Chlorophenol	1.5	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
4-Chlorophenyl phenyl ether		0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Dibenzofuran +	76	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
1,2-Dichlorobenzene	43	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
1,3-Dichlorobenzene +	1.0	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
1,4-Dichlorobenzene	11	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
3,3´-Dichlorobenzidine**	0.033	0.85 U	0.73 U	0.77 U	0.77 U	0.73 U
2,4-Dichlorophenol	0.48	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Diethyl phthalate	470	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Dimethyl phthalate +	380	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Di-n-butyl phthalate	2,300	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2,4-Dimethylphenol	9	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
4,6-Dinitro-2-methylphenol		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
2,4-Dinitrophenol**	0.2	2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
2,4-Dinitrotoluene**	0.0008	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2,6-Dinitrotoluene**	0.0007	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Di-n-octyl phthalate	10,000	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Hexachlorobenzene	11	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Hexachlorobutadiene +	15	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Hexachlorocyclopentadiene	2,200	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Hexachloroethane	2.6	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
Isophorone	8	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2-Methylnaphthalene +	39	0.42 U	0.64	0.39 U	0.39 U	0.36 U
2-Methylphenol	15	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
4-Methylphenol ++	0.66	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2-Nitroaniline		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
3-Nitroaniline		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
1-Nitroaniline		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
Nitrobenzene**	0.1	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2-Nitrophenol		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
1-Nitrophenol		2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
N-Nitrosodi-n-propylamine**	0.00005	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
N-Nitrosodiphenylamine	5.6	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2, 2'-Oxybis(1-Chloropropane)		0.018 U	0.015 U	0.016 U	0.016 U	0.015 U
Pentachlorophenol**	0.10	2.1 U	1.8 U	1.9 U	1.9 U	1.8 U
Phenol	100	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
1,2,4-Trichlorobenzene	53	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U
2,4,5-Trichlorophenol	26	0.85 U	0.73 U	0.77 U	0.77 U	0.73 U
2,4,6-Trichlorophenol **	0.07	0.42 U	0.36 U	0.39 U	0.39 U	0.36 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier I evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		A		ind surface)/Conce				
	Screening	SB15-003	SP16-001	SP16-002	SP16-003	SB17-001			
Compound/Analyte	Level (mg/kg)	10-12	2-3	9-10	15-16	1-2			
PAHs (mg/kg)									
Acenaphthene	2,900	0.032 U	0.5	0.029 U	0.029 U	0.036			
Acenaphthylene +	120	0.032 U	0.15	0.029 U	0.029 U	0.049			
Anthracene	59,000	0.032 U	0.81	0.029 U	0.029 U	0.21			
Benzo(a)anthracene	8	0.032 U	0.36	0.029 U	0.029 U	0.089			
Benzo(b)fluoranthene	25	0.032 U	0.92	0.029 U	0.029 U	0.15			
Benzo(k)fluoranthene	250	0.032 U	1.1	0.029 U	0.029 U	0.12			
Benzo(g,h,i)perylene +	160,000	0.032 U	0.81	0.029 U	0.029 U	0.034			
Benzo(a)pyrene	82	0.032 U	0.75	0.029 U	0.029 U	0.069			
Chrysene	800	0.032 U	2.3	0.029 U	0.029 U	0.087			
Dibenzo(a,h)anthracene	7.6	0.032 U	0.28	0.029 U	0.029 U	0.028 U			
Fluoranthene	21,000	0.032 U	1.8	0.029 U	0.029 U	0.12			
Fluorene	2,800	0.032 U	0.44	0.029 U	0.029 U	0.046			
Indeno(1,2,3-cd)pyrene	69	0.032 U	0.54	0.029 U	0.029 U	0.034			
Naphthalene	18	0.032 U	0.64	0.029 U	0.029 U	0.051			
Phenanthrene +	1,100	0.032 U	2.2	0.029 U	0.029 U	0.21			
Pyrene	21,000	0.032 U	2.7	0.029 U	0.029 U	0.18			
		PCBs	(mg/kg)						
Aroclor 1016		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U			
Aroclor 1221		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U			
Aroclor 1232		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U			
Aroclor 1242		0.1 U	4.7	0.094 U	0.095 U	0.15			
Aroclor 1248		0.1 U	0.088 U	0.094 U	0.095 U	0.088 U			
Aroclor 1254		0.21 U	4.3	0.19 U	0.19 U	0.18 U			
Aroclor 1260		0.21 U	0.18 U	0.19 U	0.19 U	0.18 U			
Total PCBs		0.920 U	9.532	0.850 U	0.855 U	0.862			
	Priority	Pollutant Metals	and Total Cyanide	(mg/kg)					
Antimony*	20	1.1 UJ	1.1 J	1 UJ	1.1 UJ	1 UJ			
Arsenic*	120	5 J	6.7	12 J	9.6 J	1.4			
Barium*	1,800	22 J	130 J	79 J	84 J	9.4 J			
Beryllium*	130,000	1.2	1.3	1.1	1.1	0.54			
Cadmium*	590	0.57 U	2.3	0.52 U	0.56 U	0.5 U			
Chromium ***	21	19 J	47 J	17 J	17 J	5.3 J			
Copper*	330,000	31 J	170 J	39 J	28 J	4.9 J			
Lead**		16	150 J	21	17	7.3 J			
Mercury*	32	0.032 U	0.43	0.027 U	0.033	0.04			
Nickel*	14,000	30 J	40 J	37 J	24 J	3.3 J			
Selenium*	1.3	1.1 U	1 U	1 U	1.1 U	1 U			
Silver ***	39	1.1 U	1 U	1 U	1.1 U	1 U			
Thallium*	34	2.5	1.4	1.8	1.7	1 U			
Zinc*	32,000	42 J	600 J	40 J	33 J	55 J			
Total Cyanide*	120	0.28 U	0.26 U	0.25 U	0.28 U	0.28 U			
NOTES:									

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3) \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used. (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead
- (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (10) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- (11) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SB18B-001	SB19-001	SB20-001	SB21-001	SB22-002
Compound/Analyte	Level (mg/kg)	1-2	1-2	0-0.5	1-2	8-10
		TCL Volat	iles (mg/kg)			
Acetone	16	0.062 U	0.05	0.12	0.036	0.065
Benzene	0.17	0.012 U	0.039	0.0084 U	0.077	0.0089 U
Bromodichloromethane	0.6	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Bromoform	0.8	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Bromomethane	1.2	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
2-Butanone		0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Carbon Disulfide	160	0.012 U	0.0081 U	0.011	0.0065 U	0.0089 U
Carbon Tetrachloride	0.33	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Chlorobenzene	6.5	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Chloroethane +	70	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Chloroform	2.9	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Chloromethane +	0.68	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Dibromochloromethane	0.4	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,1-Dichloroethane	110	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,2-Dichloroethane	0.1	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,1-Dichloroethene	0.3	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
cis-1,2-Dichloroethene	1.1	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
trans-1,2-Dichloroethene	3.4	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,2-Dichloropropane	0.15	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
cis-1,3-Dichloropropene	0.02	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
trans-1,3-Dichloropropene	0.02	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Ethylbenzene	19	0.012 U	0.22	0.014	0.12	0.0089 U
2-Hexanone +	1.3	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
4-Methyl-2-Pentanone		0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Methylene Chloride	0.2	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,1,2,2-Tetrachloroethane +	3.3	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Tetrachloroethene	0.3	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Toluene	29	0.012 U	0.064	0.0097	0.018	0.0089 U
1,1,1-Trichloroethane	9.6	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
1,1,2-Trichloroethane	0.3	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Trichloroethene	0.3	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0089 U
Vinyl Chloride	0.07	0.025 U	0.016 U	0.017 U	0.013 U	0.018 U
m,p-Xylene*	150	0.012 U	0.2	0.031	0.034	0.0089 U
o-Xylene*	150	0.012 U	0.12	0.011	0.036	0.0089 U
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dept			
	Screening	SB18B-001	SB19-001	SB20-001	SB21-001	SB22-002
Compound/Analyte	Level (mg/kg)	1-2	1-2	0-0.5	1-2	8-10
		TCL Semivo	latiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Bis(2-chloroethyl)ether**	0.0004	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Bis(2-ethylhexyl)phthalate	31,000	1.2	0.63	2.7	0.59 J	0.39 U
4-Bromophenyl phenyl ether		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Butyl benzyl phthalate	930	0.35 U	0.36 U	0.58	0.38 U	0.39 U
Carbazole	2.8	0.35 U	3.2	0.53	0.91 J	0.39 U
4-Chloro-3-methylphenol +	120	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
4-Chloroaniline	0.7	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2-Chloronaphthalene		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2-Chlorophenol	1.5	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
4-Chlorophenyl phenyl ether		0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Dibenzofuran +	76	0.35 U	0.94	0.38 U	0.9 J	0.39 U
1,2-Dichlorobenzene	43	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
1,3-Dichlorobenzene +	1.0	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
1,4-Dichlorobenzene	11	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
3,3´-Dichlorobenzidine**	0.033	0.7 U	0.72 U	0.75 U	0.75 U	0.78 U
2,4-Dichlorophenol	0.48	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Diethyl phthalate	470	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Dimethyl phthalate +	380	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Di-n-butyl phthalate	2,300	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2,4-Dimethylphenol	9	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
4,6-Dinitro-2-methylphenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
2,4-Dinitrophenol**	0.2	1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
2,4-Dinitrotoluene**	0.0008	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2,6-Dinitrotoluene**	0.0007	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Di-n-octyl phthalate	10,000	1.6	0.36 U	0.38 U	0.38 U	0.39 U
Hexachlorobenzene	11	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Hexachlorobutadiene +	15	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Hexachlorocyclopentadiene	2,200	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Hexachloroethane	2.6	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
Isophorone	8	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2-Methylnaphthalene +	39	0.47	20	0.59	2.3 J	0.39 U
2-Methylphenol	15	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
4-Methylphenol ++	0.66	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
3-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
4-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
Nitrobenzene**	0.1	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2-Nitrophenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
4-Nitrophenol		1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
N-Nitrosodi-n-propylamine**	0.00005	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
N-Nitrosodiphenylamine	5.6	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.015 U	0.015 U	0.016 U	0.38 U	0.39 U
Pentachlorophenol**	0.10	1.7 U	1.7 U	1.8 U	1.8 U	1.9 U
Phenol	100	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
1,2,4-Trichlorobenzene	53	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U
2,4,5-Trichlorophenol	26	0.7 U	0.72 U	0.75 U	0.75 U	0.78 U
2,4,6-Trichlorophenol **	0.07	0.35 U	0.36 U	0.38 U	0.38 U	0.39 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) J Indicates an estimated value.
- (7) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (8) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (9) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (10) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample 1	Location and Dept	h (feet below grou	ind surface)/Conce	entration		
	Screening	SB18B-001	SB19-001	SB20-001	SB21-001	SB22-002		
Compound/Analyte	Level (mg/kg)	1-2	1-2	0-0.5	1-2	8-10		
		PAHs ((mg/kg)					
Acenaphthene	2,900	0.19	3.1	0.31	3.3 J	0.031		
Acenaphthylene +	120	0.12	2.3	0.19	2.5 J	0.029 U		
Anthracene	59,000	0.67	3.1	0.78	5 J	0.047		
Benzo(a)anthracene	8	0.31	1.4	0.26	1.6 J	0.029 U		
Benzo(b)fluoranthene	25	0.57	3.4	2	3.1 J	0.029 U		
Benzo(k)fluoranthene	250	0.6	3	1.9	3.5 J	0.029 U		
Benzo(g,h,i)perylene +	160,000	0.8	3	0.89	3.7 J	0.029 U		
Benzo(a)pyrene	82	0.41	2.7	0.67	4 J	0.029 U		
Chrysene	800	1.7	5.4	1.4	5.6 J	0.04		
Dibenzo(a,h)anthracene	7.6	0.25	1.3	0.3	1.1 J	0.029 U		
Fluoranthene	21,000	1.2	7.4	2.4	8.1 J	0.029 U		
Fluorene	2,800	0.3	3.2	0.31	3.6 J	0.033		
Indeno(1,2,3-cd)pyrene	69	0.52	2.5	0.62	2.5 J	0.029 U		
Naphthalene	18	0.42	13	0.47	2.4 J	0.2		
Phenanthrene +	1,100	1.9	9.7	2.5	13 J	0.13		
Pyrene	21,000	1.8	8.9	1.9	14 J	0.029 U		
PCBs (mg/kg)								
Aroclor 1016		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U		
Aroclor 1221		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U		
Aroclor 1232		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U		
Aroclor 1242		1.9	0.55	1.3	0.1	0.094 U		
Aroclor 1248		0.085 U	0.087 U	0.091 U	0.091 U	0.094 U		
Aroclor 1254		1.6	0.52	0.91 U	0.18 U	0.19 U		
Aroclor 1260		0.17 U	0.17 U	0.18 U	0.18 U	0.19 U		
Total PCBs	<u> </u>	4.010	1.588	2.754	0.824	0.850 U		
	1	Pollutant Metals a		· · · · · · · · · · · · · · · · · · ·				
Antimony*	20	1 J	0.98 J	1 J	0.97 UJ	1.1 UJ		
Arsenic*	120	4	2.5	4.3	6.9	5.7 J		
Barium*	1,800	99 J	69 J	150 J	76 J	34 J		
Beryllium*	130,000	0.79	0.5	0.87	0.48 U	0.57 U		
Cadmium*	590	1.1	0.44	1.3	0.89	0.57 U		
Chromium ***	21	12 J	9.2 J	15 J	15 J	18 J		
Copper*	330,000	67 J	33 J	37 J	48 J	26 J		
Lead**		130 J	46 J	94 J	120 J	22		
Mercury*	32	0.2	0.1	0.53	0.33	0.029		
Nickel*	14,000	11 J	12 J	14 J	22 J	31 J		
Selenium*	1.3	0.93 U	0.82 U	1 U	0.97 U	1.1 U		
Silver ***	39	0.93 U	0.82 U	1 U	0.97 U	1.1 U		
Thallium*	34	1.2	1.1	1.5	0.97 U	1.2		
Zinc*	32,000	240 J	98 J	210 J	150 J	46 J		
Total Cyanide*	120	0.26 U	0.25 U	0.32 U	0.3 U	0.3 U		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- (7) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used.
- (8) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (9) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- (10) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (11) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	ınd surface)/Conce	entration
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003
Compound/Analyte	Level (mg/kg)	1-2	1-2	1-2	3-5	12-14
		TCL Volat	iles (mg/kg)			
Acetone	16	0.056 U	0.056 U	0.12	0.11	0.058 U
Benzene	0.17	0.011 U	0.011 U	1.5	0.22	0.012 U
Bromodichloromethane	0.6	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Bromoform	0.8	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Bromomethane	1.2	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
2-Butanone		0.022 U	0.022 U	0.026	0.034 U	0.023 U
Carbon Disulfide	160	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Carbon Tetrachloride	0.33	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Chlorobenzene	6.5	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Chloroethane +	70	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
Chloroform	2.9	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Chloromethane +	0.68	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Dibromochloromethane	0.4	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1-Dichloroethane	110	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,2-Dichloroethane	0.1	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1-Dichloroethene	0.3	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
cis-1,2-Dichloroethene	1.1	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
trans-1,2-Dichloroethene	3.4	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,2-Dichloropropane	0.15	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
cis-1,3-Dichloropropene	0.02	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
trans-1,3-Dichloropropene	0.02	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Ethylbenzene	19	0.011 U	0.016	2.8	4.6	0.012 U
2-Hexanone +	1.3	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
4-Methyl-2-Pentanone		0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
Methylene Chloride	0.2	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1,2,2-Tetrachloroethane +	3.3	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Tetrachloroethene	0.3	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Toluene	29	0.011 U	0.011 U	0.03	0.54	0.012 U
1,1,1-Trichloroethane	9.6	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
1,1,2-Trichloroethane	0.3	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Trichloroethene	0.3	0.011 U	0.011 U	0.0091 U	0.017 U	0.012 U
Vinyl Chloride	0.07	0.022 U	0.022 U	0.018 U	0.034 U	0.023 U
m,p-Xylene*	150	0.011 U	0.011 U	0.068	6.7	0.012 U
o-Xylene*	150	0.011 U	0.011 U	0.72	6.8	0.012 U
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.(3) Shaded value exceeds Tier 1 screening level.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample l	Location and Dept	h (feet below grou	nd surface)/Conce	entration
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003
Compound/Analyte	Level (mg/kg)	1-2	1-2	1-2	3-5	12-14
			atiles (mg/kg)			
Bis(2-chloroethoxy)methane		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Bis(2-chloroethyl)ether**	0.0004	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Bis(2-ethylhexyl)phthalate	31.000	2.1	1.7 U	0.36 U	1.2	0.42
4-Bromophenyl phenyl ether		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Butyl benzyl phthalate	930	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Carbazole	2.8	1.8 U	4.1	1.9	5.7	0.4 U
4-Chloro-3-methylphenol +	120	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
4-Chloroaniline **	0.7	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2-Chloronaphthalene		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2-Chlorophenol **	1.5	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
4-Chlorophenyl phenyl ether		1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Dibenzofuran +	76	1.8 U	1.7 U	0.84	4.7	0.4 U
1,2-Dichlorobenzene	43	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
1,3-Dichlorobenzene + **	1.0	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
1,4-Dichlorobenzene	11	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
3,3'-Dichlorobenzidine**	0.033	3.7 U	3.5 U	0.72 U	0.81 U	0.8 U
2,4-Dichlorophenol **	0.48	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Diethyl phthalate	470	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Dimethyl phthalate +	380	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Di-n-butyl phthalate	2,300	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2,4-Dimethylphenol	9	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
4,6-Dinitro-2-methylphenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U
2,4-Dinitrophenol**	0.2	8.9 U	8.4 U	1.7 U	2 U	1.9 U
2,4-Dinitrotoluene**	0.0008	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2,6-Dinitrotoluene**	0.0007	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Di-n-octyl phthalate	10,000	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Hexachlorobenzene	11	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Hexachlorobutadiene +	15	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Hexachlorocyclopentadiene	2,200	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Hexachloroethane	2.6	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
Isophorone	8	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2-Methylnaphthalene +	39	1.8 U	1.7 U	4.1	58	0.4
2-Methylphenol	15	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
4-Methylphenol ++	0.66	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2-Nitroaniline		8.9 U	8.4 U	1.7 U	2 U	1.9 U
3-Nitroaniline		8.9 U	8.4 U	1.7 U	2 U	1.9 U
4-Nitroaniline		8.9 U	8.4 U	1.7 U	2 U	1.9 U
Nitrobenzene**	0.1	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2-Nitrophenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U
4-Nitrophenol		8.9 U	8.4 U	1.7 U	2 U	1.9 U
N-Nitrosodi-n-propylamine**	0.00005	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
N-Nitrosodiphenylamine	5.6	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2, 2'-Oxybis(1-Chloropropane)		0.078 U	0.073 U	0.015 U	0.017 U	0.017 U
Pentachlorophenol**	0.10	8.9 U	8.4 U	1.7 U	2 U	1.9 U
Phenol	100	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
1,2,4-Trichlorobenzene	53	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U
2,4,5-Trichlorophenol	26	3.7 U	3.5 U	0.72 U	0.81 U	0.8 U
2,4,6-Trichlorophenol **	0.07	1.8 U	1.7 U	0.36 U	0.41 U	0.4 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) **Values exceeded TACO or non-TACO screening level but were consistently non-detect so no values were shaded.
- (7) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (8) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
 (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample l	Location and Dept	h (feet below grou	nd surface)/Conce	entration		
	Screening	SB23-001	SB24-001	SB25-001	SB25-002	SB25-003		
Compound/Analyte	Level (mg/kg)	1-2	1-2	1-2	3-5	12-14		
	·	PAHs (mg/kg)					
Acenaphthene	2,900	2.1	0.63	8.3	19	0.03 U		
Acenaphthylene +	120	5	0.34	6.1	8.9	0.03 U		
Anthracene	59,000	4.1	2.1	8.1	16	0.03 U		
Benzo(a)anthracene	8	5.9	0.29	8	14	0.03 U		
Benzo(b)fluoranthene	25	3.1	1.5	4	7	0.03 U		
Benzo(k)fluoranthene	250	3.2	1.3	3.3	7	0.03 U		
Benzo(g,h,i)perylene +	160,000	1.6	1.5	2.3	3.7	0.03 U		
Benzo(a)pyrene	82	5	1.7	5.1	9.2	0.03 U		
Chrysene	800	6.6	3.6	9.1	15	0.03 U		
Dibenzo(a,h)anthracene	7.6	1.4 U	0.72	0.84	0.94	0.03 U		
Fluoranthene	21,000	9.4	6.4	16	20	0.03 U		
Fluorene	2,800	2.4	0.67	7	26	0.067		
Indeno(1,2,3-cd)pyrene	69	1.4 U	1.4	2.1	3.1 U	0.03 U		
Naphthalene	18	1.8	0.65	6.7	28	0.6		
Phenanthrene +	1,100	10	5.4	30	62	0.15		
Pyrene	21,000	14	7	24	32	0.03 U		
PCBs (mg/kg)								
Aroclor 1016		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U		
Aroclor 1221		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U		
Aroclor 1232		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U		
Aroclor 1242		0.95	1.1	0.086 U	0.098 U	0.096 U		
Aroclor 1248		0.089 U	0.087 U	0.086 U	0.098 U	0.096 U		
Aroclor 1254		0.72	0.9	0.17 U	0.2 U	0.19 U		
Aroclor 1260		0.18 U	0.17 U	0.17 U	0.2 U	0.19 U		
Total PCBs	<u> </u>	2.206	2.518	0.770 U	0.890 U	0.860 U		
		Pollutant Metals a						
Antimony*	20	1.1 J	1.1 J	1.1 UJ	1.1 UJ	1.1 UJ		
Arsenic*	120	5	2.5	3.2	7.8 J	11 J		
Barium*	1,800	98 J	110 J	130 J	92 J	110 J		
Beryllium*	130,000	0.76	0.62	0.76	1.3	1.2		
Cadmium*	590	0.88	1.2	0.59	0.56 U	0.57 U		
Chromium ***	21	10 J	13 J	7.8 J	17 J	18 J		
Copper*	330,000	41 J	60 J	18 J	25 J	26 J		
Lead**		140 J	150 J	61 J	58	17		
Mercury*	32	0.21	0.2	0.17	0.35	0.03 U		
Nickel*	14,000	13 J	12 J	6.9 J	29 J	28 J		
Selenium*	1.3	0.99 U	0.96 U	1.1 U	1.1 U	1.1 U		
Silver ***	39	0.99 U	0.96 U	1.1 U	1.1 U	1.1 U		
Thallium*	34	1.4	1.3	1.4	1.8	1.9		
Zinc*	32,000	120 J	270 J	73 J	58 J	41 J		
Total Cyanide*	120	0.28 U	0.22 U	0.27 U	0.26 U	0.31 U		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3) \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used. (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead
- (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (10) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- $(11) + Screening\ level\ obtained\ from\ Table\ A: Soil\ Remediation\ Objectives\ for\ Residential\ Properties,\ Non-TACO\ Chemicals\ (Illinois\ EPA\ 2004).$
- (12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	ınd surface)/Conce	entration
	Screening	SB27-001	SB27-002	SB28-001	SB28-002	SB29-001
Compound/Analyte	Level (mg/kg)	5-7	10-12	2-3	5-7	3-5
		TCL Volat	iles (mg/kg)			
Acetone	16	0.046	0.035 U	0.093	0.048	0.055 U
Benzene	0.17	0.0084 U	0.0069 U	0.041	0.0076 U	0.011 U
Bromodichloromethane	0.6	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Bromoform	0.8	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Bromomethane	1.2	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
2-Butanone		0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Carbon Disulfide	160	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Carbon Tetrachloride	0.33	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chlorobenzene	6.5	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chloroethane +	70	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Chloroform	2.9	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Chloromethane +	0.68	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Dibromochloromethane	0.4	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1-Dichloroethane	110	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,2-Dichloroethane	0.1	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1-Dichloroethene	0.3	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
cis-1,2-Dichloroethene	1.1	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
trans-1,2-Dichloroethene	3.4	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,2-Dichloropropane	0.15	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
cis-1,3-Dichloropropene	0.02	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
trans-1,3-Dichloropropene	0.02	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Ethylbenzene	19	0.0084 U	0.0069 U	0.059	0.0076 U	0.011 U
2-Hexanone +	1.3	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
4-Methyl-2-Pentanone		0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Methylene Chloride	0.2	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,2,2-Tetrachloroethane +	3.3	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Tetrachloroethene	0.3	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Toluene	29	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,1-Trichloroethane	9.6	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
1,1,2-Trichloroethane	0.3	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Trichloroethene	0.3	0.0084 U	0.0069 U	0.0087 U	0.0076 U	0.011 U
Vinyl Chloride	0.07	0.017 U	0.014 U	0.017 U	0.015 U	0.022 U
m,p-Xylene*	150	0.0084 U	0.0069 U	0.012	0.0076 U	0.011 U
o-Xylene*	150	0.0084 U	0.0069 U	0.015	0.0076 U	0.011 U
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou		
	Screening	SB27-001	SB27-002	SB28-001	SB28-002	SB29-001
Compound/Analyte	Level (mg/kg)	5-7	10-12	2-3	5-7	3-5
			atiles (mg/kg)	•	•	
Bis(2-chloroethoxy)methane		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Bis(2-chloroethyl)ether**	0.0004	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Bis(2-ethylhexyl)phthalate	31,000	0.38 U	0.38 U	0.45	0.4 U	0.39 U
4-Bromophenyl phenyl ether		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Butyl benzyl phthalate	930	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Carbazole	2.8	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4-Chloro-3-methylphenol +	120	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4-Chloroaniline	0.7	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Chloronaphthalene		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Chlorophenol	1.5	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4-Chlorophenyl phenyl ether		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Dibenzofuran +	76	0.38 U	0.38 U	0.5	0.4 U	0.39 U
1,2-Dichlorobenzene	43	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
1,3-Dichlorobenzene +	1.0	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
1,4-Dichlorobenzene	11	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
3,3´-Dichlorobenzidine**	0.033	0.76 U	0.76 U	0.78 U	0.79 U	0.78 U
2,4-Dichlorophenol	0.48	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Diethyl phthalate	470	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Dimethyl phthalate +	380	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Di-n-butyl phthalate	2,300	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2,4-Dimethylphenol	9	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4,6-Dinitro-2-methylphenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dinitrophenol**	0.2	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dinitrotoluene**	0.0008	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2,6-Dinitrotoluene**	0.0007	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Di-n-octyl phthalate	10,000	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Hexachlorobenzene	11	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Hexachlorobutadiene +	15	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Hexachlorocyclopentadiene	2,200	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Hexachloroethane	2.6	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Isophorone	8	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Methylnaphthalene +	39	0.38 U	0.38 U	1.1	0.4 U	0.39 U
2-Methylphenol	15	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
4-Methylphenol ++	0.66	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
3-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
Nitrobenzene**	0.1	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2-Nitrophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitrophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodi-n-propylamine**	0.00005	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
N-Nitrosodiphenylamine	5.6	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
Pentachlorophenol**	0.10	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	100	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
1,2,4-Trichlorobenzene	53	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U
2,4,5-Trichlorophenol	26	0.76 U	0.76 U	0.78 U	0.79 U	0.78 U
2,4,6-Trichlorophenol **	0.07	0.38 U	0.38 U	0.39 U	0.4 U	0.39 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier I evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	ind surface)/Conce	entration		
	Screening	SB27-001	SB27-002	SB28-001	SB28-002	SB29-001		
Compound/Analyte	Level (mg/kg)	5-7	10-12	2-3	5-7	3-5		
		PAHs ((mg/kg)					
Acenaphthene	2,900	0.029 U	0.029 U	1.7	0.03 U	0.035		
Acenaphthylene +	120	0.029 U	0.029 U	1.4	0.03 U	0.029 U		
Anthracene	59,000	0.029 U	0.029 U	3.5	0.03 U	0.038		
Benzo(a)anthracene	8	0.029 U	0.029 U	1.1	0.03 U	0.029 U		
Benzo(b)fluoranthene	25	0.029 U	0.029 U	1.8	0.03 U	0.029 U		
Benzo(k)fluoranthene	250	0.029 U	0.029 U	1.9	0.03 U	0.029 U		
Benzo(g,h,i)perylene +	160,000	0.029 U	0.029 U	3	0.03 U	0.029 U		
Benzo(a)pyrene	82	0.029 U	0.029 U	2.6	0.03 U	0.029 U		
Chrysene	800	0.029 U	0.029 U	3.8	0.03 U	0.052		
Dibenzo(a,h)anthracene	7.6	0.029 U	0.029 U	0.89	0.03 U	0.029 U		
Fluoranthene	21,000	0.029 U	0.029 U	0.051	0.03 U	0.029		
Fluorene	2,800	0.029 U	0.029 U	1.1	0.03 U	0.033		
Indeno(1,2,3-cd)pyrene	69	0.029 U	0.029 U	1.9	0.03 U	0.029 U		
Naphthalene	18	0.029 U	0.029 U	1.4	0.03 U	0.094		
Phenanthrene +	1,100	0.031	0.047	0.038	0.03 U	0.14		
Pyrene	21,000	0.029 U	0.029 U	0.097	0.03 U	0.044		
PCBs (mg/kg)								
Aroclor 1016		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U		
Aroclor 1221		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U		
Aroclor 1232		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U		
Aroclor 1242		0.094 U	0.093 U	0.34	0.14	0.094 U		
Aroclor 1248		0.094 U	0.093 U	0.093 U	0.096 U	0.094 U		
Aroclor 1254		0.19 U	0.19 U	0.2	0.19 U	0.19 U		
Aroclor 1260		0.19 U	0.19 U	0.19 U	0.19 U	0.19 U		
Total PCBs		0.850 U	0.845 U	1.102	0.904	0.850 U		
	1	Pollutant Metals a			1			
Antimony*	20	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ		
Arsenic*	120	7.1 J	7 J	6.1	9.2 J	11 J		
Barium*	1,800	32 J	39 J	67 J	41 J	41 J		
Beryllium*	130,000	0.53 U	0.55 U	0.55 U	0.57 U	0.57 U		
Cadmium*	590	0.53 U	0.55 U	0.71	0.57 U	0.57 U		
Chromium ***	21	16 J	17 J	14 J	18 J	18 J		
Copper*	330,000	39 J	29 J	42 J	27 J	30 J		
Lead**		20	19	120 J	31	23		
Mercury*	32	0.028 U	0.028 U	0.53	0.049	0.031		
Nickel*	14,000	31 J	30 J	20 J	33 J	38 J		
Selenium*	1.3	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U		
Silver ***	39	12	1.1 U	1.1 U	1.1 U	1.1 U		
Thallium*	34	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U		
Zinc*	32,000	50 J	42 J	150 J	61 J	46 J		
Total Cyanide*	120	0.28 U	0.27 U	0.29 U	0.3 U	0.28 U		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- (7) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used.
- (8) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (9) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- (10) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (11) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002
Compound/Analyte	Level (mg/kg)	12-14	2-3	6-8	2-3	3-5
		TCL Volat	iles (mg/kg)			
Acetone	16	0.067 U	0.03	0.064 U	0.067 U	0.081 U
Benzene	0.17	0.013 U	0.024	0.013 U	5.2	0.77
Bromodichloromethane	0.6	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Bromoform	0.8	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Bromomethane	1.2	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
2-Butanone		0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Carbon Disulfide	160	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Carbon Tetrachloride	0.33	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chlorobenzene	6.5	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chloroethane +	70	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Chloroform	2.9	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Chloromethane +	0.68	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Dibromochloromethane	0.4	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1-Dichloroethane	110	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,2-Dichloroethane	0.1	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1-Dichloroethene	0.3	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
cis-1,2-Dichloroethene	1.1	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
trans-1,2-Dichloroethene	3.4	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,2-Dichloropropane	0.15	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
cis-1,3-Dichloropropene	0.02	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
trans-1,3-Dichloropropene	0.02	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Ethylbenzene	19	0.013 U	0.038	0.013 U	1.5	2
2-Hexanone +	1.3	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
4-Methyl-2-Pentanone		0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Methylene Chloride	0.2	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1,2,2-Tetrachloroethane +	3.3	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Tetrachloroethene	0.3	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Toluene	29	0.013 U	0.032	0.013 U	0.77	0.016 U
1,1,1-Trichloroethane	9.6	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
1,1,2-Trichloroethane	0.3	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Trichloroethene	0.3	0.013 U	0.0042 U	0.013 U	0.013 U	0.016 U
Vinyl Chloride	0.07	0.027 U	0.0084 U	0.026 U	0.027 U	0.033 U
m,p-Xylene*	150	0.013 U	0.047	0.013 U	0.62	0.057
o-Xylene*	150	0.013 U	0.029	0.013 U	0.47	0.034
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.(3) Shaded value exceeds Tier 1 screening level.
- (3) Shaded value exceeds 1 ier 1 screening level.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou		
	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002
Compound/Analyte	Level (mg/kg)	12-14	2-3	6-8	2-3	3-5
		TCL Semivol	atiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Bis(2-chloroethyl)ether**	0.0004	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	0.33 U	0.37 U	0.99	0.87
4-Bromophenyl phenyl ether		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Butyl benzyl phthalate	930	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Carbazole	2.8	0.39 U	0.33 U	0.37 U	0.46	1.3
4-Chloro-3-methylphenol +	120	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
4-Chloroaniline	0.7	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Chloronaphthalene		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Chlorophenol	1.5	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
4-Chlorophenyl phenyl ether		0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Dibenzofuran +	76	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
1,2-Dichlorobenzene	43	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
1,3-Dichlorobenzene +	1.0	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
1,4-Dichlorobenzene	11	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
3,3´-Dichlorobenzidine**	0.033	0.78 U	0.33 U	0.74 U	0.66 U	0.78 U
2,4-Dichlorophenol	0.48	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Diethyl phthalate	470	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Dimethyl phthalate +	380	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Di-n-butyl phthalate	2,300	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2,4-Dimethylphenol	9	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
4,6-Dinitro-2-methylphenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
2,4-Dinitrophenol**	0.2	1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
2,4-Dinitrotoluene**	0.0008	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2,6-Dinitrotoluene**	0.0007	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Di-n-octyl phthalate	10,000	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Hexachlorobenzene	11	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Hexachlorobutadiene +	15	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Hexachlorocyclopentadiene	2,200	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Hexachloroethane	2.6	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
Isophorone	8	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Methylnaphthalene +	39	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Methylphenol	15	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
4-Methylphenol ++	0.66	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Nitroaniline		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
3-Nitroaniline		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
4-Nitroaniline		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
Nitrobenzene**	0.1	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2-Nitrophenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
4-Nitrophenol		1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
N-Nitrosodi-n-propylamine**	0.00005	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
N-Nitrosodiphenylamine	5.6	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.39 U	0.33 U	0.016 U	0.014 U	0.017 U
Pentachlorophenol**	0.10	1.9 U	1.7 U	1.8 U	1.6 U	1.9 U
Phenol	100	0.39 U	15	0.37 U	0.33 U	0.39 U
1,2,4-Trichlorobenzene	53	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U
2,4,5-Trichlorophenol	26	0.78 U	0.66 U	0.74 U	0.66 U	0.78 U
2,4,6-Trichlorophenol **	0.07	0.39 U	0.33 U	0.37 U	0.33 U	0.39 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier I evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	ind surface)/Conce	entration
	Screening	SB29-002	SB31-001	SB31-002	SB32-001	SB32-002
Compound/Analyte	Level (mg/kg)	12-14	2-3	6-8	2-3	3-5
		PAHs ((mg/kg)			
Acenaphthene	2,900	0.029 U	0.44	0.028 U	0.8	0.84
Acenaphthylene +	120	0.029 U	0.13 U	0.029	1.2	0.99
Anthracene	59,000	0.029 U	0.7	0.047	1.5	0.98
Benzo(a)anthracene	8	0.029 U	0.2	0.028 U	2.7	1.8
Benzo(b)fluoranthene	25	0.029 U	0.84	0.028 U	1.2	0.87
Benzo(k)fluoranthene	250	0.029 U	0.48	0.028 U	0.76	0.75
Benzo(g,h,i)perylene +	160,000	0.029 U	1.5	0.028 U	0.61	0.38
Benzo(a)pyrene	82	0.029 U	0.91	0.028 U	1.7	1.1
Chrysene	800	0.029 U	1.5	0.075	2.5	1.7
Dibenzo(a,h)anthracene	7.6	0.029 U	0.13 U	0.028 U	0.25 U	0.3 U
Fluoranthene	21,000	0.029 U	0.67	0.075	3.4	2.8
Fluorene	2,800	0.029 U	0.53	0.03	1	0.87
Indeno(1,2,3-cd)pyrene	69	0.029 U	1.1	0.028 U	0.56	0.34
Naphthalene	18	0.029 U	0.68	0.11	0.25 U	2.1
Phenanthrene +	1,100	0.036	2	0.17	3.8	3.7
Pyrene	21,000	0.029 U	1.1	0.13	4.6	4
		PCBs (-		
Aroclor 1016		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1221		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1232		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1242		0.095 U	3.7	0.093 U	1.3	0.15
Aroclor 1248		0.095 U	0.083 U	0.093 U	0.085 U	0.093 U
Aroclor 1254		0.19 U	1.8	0.19 U	1.1	0.19 U
Aroclor 1260		0.19 U	0.17 U	0.19 U	0.17 U	0.19 U
Total PCBs	<u> </u>	0.855 U	6.002	0.845 U	2.910	0.902
	1	Pollutant Metals a		` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `		
Antimony*	20	1.1 UJ	1 UJ	1.1 UJ	1.1 J	1.1 J
Arsenic*	120	7.2 J	5	12 J	4.8	3.4 J
Barium*	1,800	38 J	43 J	31 J	110 J	80 J
Beryllium*	130,000	0.55 U	0.62 1.2	0.93	1.2	0.9
Cadmium*	590	0.55 U	·	0.55 U		0.7
Chromium ***	21	17 J	16 J	19 J	29 J	13 J
Copper*	330,000	27 J	33 J	29 J	91 J	35 J
Lead**		18	120 J	18	190 J	65
Mercury*	32	0.032	0.25	0.037	0.21	0.052
Nickel*	14,000	32 J	18 J	31 J	18 J	11 J
Selenium*	1.3	1.1 U	1 U	1.1 U	0.98 U	1.1 U
Silver ***	39	1.1 U	1 U	1.1 U	0.98 U	1.1 U
Thallium*	34	1.1 U	1 U	1.2	1.3	1.5
Zinc*	32,000	50 J	200 J	45 J	260 J	88 J
Total Cyanide*	120	0.29 U	0.24 U	0.27 U	0.25 U	0.27 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3) \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used. (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead
- (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (10) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- $(11) + Screening\ level\ obtained\ from\ Table\ A: Soil\ Remediation\ Objectives\ for\ Residential\ Properties, Non-TACO\ Chemicals\ (Illinois\ EPA\ 2004).$
- (12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7
		TCL Volat	iles (mg/kg)			
Acetone	16	0.042 U	0.12	0.064 U	0.041 U	0.14
Benzene	0.17	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromodichloromethane	0.6	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromoform	0.8	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Bromomethane	1.2	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
2-Butanone		0.017 U	0.027	0.026 U	0.017 U	0.024 U
Carbon Disulfide	160	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Carbon Tetrachloride	0.33	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chlorobenzene	6.5	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chloroethane +	70	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Chloroform	2.9	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Chloromethane +	0.68	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Dibromochloromethane	0.4	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1-Dichloroethane	110	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,2-Dichloroethane	0.1	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1-Dichloroethene	0.3	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
cis-1,2-Dichloroethene	1.1	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
trans-1,2-Dichloroethene	3.4	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,2-Dichloropropane	0.15	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
cis-1,3-Dichloropropene	0.02	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
trans-1,3-Dichloropropene	0.02	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Ethylbenzene	19	0.01	0.012 U	0.013 U	0.015	0.012 U
2-Hexanone +	1.3	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
4-Methyl-2-Pentanone		0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Methylene Chloride	0.2	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1,2,2-Tetrachloroethane +	3.3	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Tetrachloroethene	0.3	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Toluene	29	0.0084 U	0.012 U	0.013 U	0.013	0.012 U
1,1,1-Trichloroethane	9.6	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
1,1,2-Trichloroethane	0.3	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Trichloroethene	0.3	0.0084 U	0.012 U	0.013 U	0.0083 U	0.012 U
Vinyl Chloride	0.07	0.017 U	0.024 U	0.026 U	0.017 U	0.024 U
m,p-Xylene*	150	0.0084 U	0.012 U	0.013 U	0.043	0.012 U
o-Xylene*	150	0.0084 U	0.025	0.013 U	0.033	0.012 U
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) NA Not analyzed.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	nd surface)/Conce	entration
	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7
		TCL Semivol	latiles (mg/kg)			
Bis(2-chloroethoxy)methane		2 U	0.4 U	0.39 U	1.8 U	0.4 U
Bis(2-chloroethyl)ether**	0.0004	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Bis(2-ethylhexyl)phthalate	31,000	2 U	0.4 U	0.39 U	2	0.4 U
4-Bromophenyl phenyl ether		2 U	0.4 U	0.39 U	1.8 U	0.4 U
Butyl benzyl phthalate	930	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Carbazole	2.8	2 U	0.4 U	0.39 U	1.8 U	0.4 U
4-Chloro-3-methylphenol +	120	2 U	0.4 U	0.39 U	1.8 U	0.4 U
4-Chloroaniline	0.7	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2-Chloronaphthalene		2 U	0.4 U	0.39 U	1.8 U	0.4 U
2-Chlorophenol	1.5	2 U	0.4 U	0.39 U	1.8 U	0.4 U
4-Chlorophenyl phenyl ether		2 U	0.4 U	0.39 U	1.8 U	0.4 U
Dibenzofuran +	76	2 U	0.4 U	0.39 U	1.8 U	0.4 U
1,2-Dichlorobenzene	43	2 U	0.4 U	0.39 U	1.8 U	0.4 U
1,3-Dichlorobenzene + **	1.0	2 U	0.4 U	0.39 U	1.8 U	0.4 U
1,4-Dichlorobenzene	11	2 U	0.4 U	0.39 U	1.8 U	0.4 U
3,3'-Dichlorobenzidine**	0.033	4.1 U	0.81 U	0.79 U	3.5 U	0.8 U
2,4-Dichlorophenol	0.48	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Diethyl phthalate	470	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Dimethyl phthalate +	380	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Di-n-butyl phthalate	2,300	6.3	0.4 U	0.39 U	1.8 U	0.4 U
2,4-Dimethylphenol	9	2 U	0.4 U	0.39 U	1.8 U	0.4 U
4,6-Dinitro-2-methylphenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U
2,4-Dinitrophenol**	0.2	9.9 U	2 U	1.9 U	8.6 U	1.9 U
2,4-Dinitrotoluene**	0.0008	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2,6-Dinitrotoluene**	0.0007	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Di-n-octyl phthalate	10,000	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Hexachlorobenzene	11	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Hexachlorobutadiene +	15	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Hexachlorocyclopentadiene	2,200	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Hexachloroethane	2.6	2 U	0.4 U	0.39 U	1.8 U	0.4 U
Isophorone	8	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2-Methylnaphthalene +	39	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2-Methylphenol	15	2 U	0.4 U	0.39 U	1.8 U	0.4 U
4-Methylphenol ++	0.66	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2-Nitroaniline		9.9 U	2 U	1.9 U	8.6 U	1.9 U
3-Nitroaniline		9.9 U	2 U	1.9 U	8.6 U	1.9 U
4-Nitroaniline		9.9 U	2 U	1.9 U	8.6 U	1.9 U
Nitrobenzene**	0.1	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2-Nitrophenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U
4-Nitrophenol		9.9 U	2 U	1.9 U	8.6 U	1.9 U
N-Nitrosodi-n-propylamine**	0.00005	2 U	0.4 U	0.39 U	1.8 U	0.4 U
N-Nitrosodiphenylamine	5.6	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2, 2'-Oxybis(1-Chloropropane)		0.087 U	0.017 U	0.017 U	0.075 U	0.017 U
Pentachlorophenol**	0.10	9.9 U	2 U	1.9 U	8.6 U	1.9 U
Phenol	100	2 U	0.4 U	0.39 U	1.8 U	0.4 U
1,2,4-Trichlorobenzene	53	2 U	0.4 U	0.39 U	1.8 U	0.4 U
2,4,5-Trichlorophenol	26	4.1 U	0.81 U	0.79 U	3.5 U	0.8 U
2,4,6-Trichlorophenol **	0.07	2 U	0.4 U	0.39 U	1.8 U	0.4 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) **Values exceeded TACO or non-TACO screening level but were consistently non-detect so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier I evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration					
	Screening	SB33-001	SB33-002	SB33-003	SP34-001	SP34-002	
Compound/Analyte	Level (mg/kg)	0-0.5	5-7	10-12	0-0.5	5-7	
		PAHs	(mg/kg)				
Acenaphthene	2,900	1.5 U	0.031 U	0.03 U	0.13 U	0.12	
Acenaphthylene +	120	1.6	0.031 U	0.03 U	0.19	0.086	
Anthracene	59,000	1.8	0.031 U	0.03 U	0.36	0.17	
Benzo(a)anthracene	8	2.8	0.031 U	0.03 U	0.13 U	0.094	
Benzo(b)fluoranthene	25	1.7	0.031 U	0.03 U	0.24	0.13	
Benzo(k)fluoranthene	250	1.5 U	0.031 U	0.03 U	0.24	0.14	
Benzo(g,h,i)perylene +	160,000	1.5 U	0.031 U	0.03 U	0.57	0.36	
Benzo(a)pyrene	82	1.8	0.031 U	0.03 U	0.13	0.14	
Chrysene	800	3.2	0.031 U	0.041	0.75	0.39	
Dibenzo(a,h)anthracene	7.6	1.5 U	0.031 U	0.03 U	0.13 U	0.11	
Fluoranthene	21,000	3.7	0.031 U	0.039	0.21	0.33	
Fluorene	2,800	1.5 U	0.031 U	0.03 U	0.13 U	0.31	
Indeno(1,2,3-cd)pyrene	69	1.5 U	0.031 U	0.03 U	0.29	0.24	
Naphthalene	18	2.1	0.14	0.042	0.38	0.03 U	
Phenanthrene +	1,100	4.1	0.076	0.083	1.3	0.13	
Pyrene	21,000	5.5	0.047	0.033	0.36	1.2	
			(mg/kg)				
Aroclor 1016		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U	
Aroclor 1221		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U	
Aroclor 1232		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U	
Aroclor 1242		2.5	0.096 U	0.094 U	0.87 U	0.098 U	
Aroclor 1248		0.088 U	0.096 U	0.094 U	0.87 U	0.098 U	
Aroclor 1254		2.2	0.19 U	0.19 U	1.7 U	0.2 U	
Aroclor 1260		0.18 U	0.19 U	0.19 U	1.7 U	0.2 U	
Total PCBs		5.232	0.860 U	0.850 U	7.750 U	0.890 U	
	1	Pollutant Metals		· · · · · · · · · · · · · · · · · · ·			
Antimony*	20	1.1 UJ	1.1 UJ	1.1 UJ	1 UJ	1.2 UJ	
Arsenic*	120	5.9	5.1 J	17 J	1.2	7.5 J	
Barium*	1,800	100 J	97 J	63 J	59 J	100 J	
Beryllium*	130,000	0.86	1.2	1	0.57	1.3	
Cadmium*	590	0.59	0.59	0.54 U	0.54	0.59 U	
Chromium ***	21	11 J	17 J	16 J	5.1 J	21 J	
Copper*	330,000	43 J	31 J	55 J	6.8 J	28 J	
Lead**		140 J	17	30	25 J	19	
Mercury*	32	0.28	0.046	0.023 U	0.026 U	0.031 U	
Nickel*	14,000	12 J	26 J	30 J	7.4 J	33 J	
Selenium*	1.3	1.1 U	1.1 U	1.1 U	1 U	1.2 U	
Silver ***	39	1.1 U	1.1 U	1.1 U	1 U	1.2 U	
Thallium*	34	1.5	1.9	2	1.3	2.1	
Zinc*	32,000	69 J	54 J	43 J	29 J	53 J	
Total Cyanide*	120	0.29 U	0.34 U	0.29 U	0.27 U	0.31 U	

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- (7) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used.
- (8) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (9) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- (10) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (11) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	ınd surface)/Conce	entration
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9
		TCL Volat	iles (mg/kg)			
Acetone	16	0.14	0.13	0.042 U	0.044 U	0.082
Benzene	0.17	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromodichloromethane	0.6	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromoform	0.8	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Bromomethane	1.2	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
2-Butanone		0.015	0.027	0.017 U	0.018 U	0.02 U
Carbon Disulfide	160	0.013	0.012 U	0.0084 U	0.0088 U	0.0099 U
Carbon Tetrachloride	0.33	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chlorobenzene	6.5	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chloroethane +	70	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Chloroform	2.9	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Chloromethane +	0.68	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Dibromochloromethane	0.4	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1-Dichloroethane	110	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,2-Dichloroethane	0.1	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1-Dichloroethene	0.3	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
cis-1,2-Dichloroethene	1.1	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
trans-1,2-Dichloroethene	3.4	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,2-Dichloropropane	0.15	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
cis-1,3-Dichloropropene	0.02	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
trans-1,3-Dichloropropene	0.02	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Ethylbenzene	19	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
2-Hexanone +	1.3	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
4-Methyl-2-Pentanone		0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Methylene Chloride	0.2	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,2,2-Tetrachloroethane +	3.3	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Tetrachloroethene	0.3	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Toluene	29	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,1-Trichloroethane	9.6	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
1,1,2-Trichloroethane	0.3	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Trichloroethene	0.3	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Vinyl Chloride	0.07	0.014 U	0.023 U	0.017 U	0.018 U	0.02 U
m,p-Xylene*	150	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
o-Xylene*	150	0.0071 U	0.012 U	0.0084 U	0.0088 U	0.0099 U
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou		
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9
		TCL Semivol	atiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
Bis(2-chloroethyl)ether**	0.0004	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
Bis(2-ethylhexyl)phthalate	31,000	5.6	0.39 U	0.39 U	0.42 U	0.39 U
4-Bromophenyl phenyl ether		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
Butyl benzyl phthalate	930	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
Carbazole	2.8	0.47	0.39 U	0.39 U	0.67	0.39 U
4-Chloro-3-methylphenol +	120	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
4-Chloroaniline	0.7	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
2-Chloronaphthalene		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
2-Chlorophenol	1.5	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
4-Chlorophenyl phenyl ether		0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
Dibenzofuran +	76	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
1,2-Dichlorobenzene	43	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
1,3-Dichlorobenzene +	1.0	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
1,4-Dichlorobenzene	11	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
3,3'-Dichlorobenzidine**	0.033	0.71 U	0.79 U	0.77 U	0.85 U	0.77 U
2,4-Dichlorophenol	0.48	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
Diethyl phthalate	470	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
Dimethyl phthalate +	380	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
Di-n-butyl phthalate	2,300	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
2,4-Dimethylphenol	9	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
4,6-Dinitro-2-methylphenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U
2,4-Dinitrophenol**	0.2	1.7 U	1.9 U	1.9 U	2.1 U	1.9 U
2,4-Dinitrotoluene**	0.0008	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
2,6-Dinitrotoluene**	0.0007	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
Di-n-octyl phthalate	10,000	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
Hexachlorobenzene	11	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
Hexachlorobutadiene +	15	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
Hexachlorocyclopentadiene	2,200	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
Hexachloroethane	2.6	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
Isophorone	8	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
2-Methylnaphthalene +	39	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
2-Methylphenol	15	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
4-Methylphenol ++	0.66	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
2-Nitroaniline		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U
3-Nitroaniline		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U
4-Nitroaniline		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U
Nitrobenzene**	0.1	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
2-Nitrophenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U
4-Nitrophenol		1.7 U	1.9 U	1.9 U	2.1 U	1.9 U
N-Nitrosodi-n-propylamine**	0.00005	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
N-Nitrosodiphenylamine	5.6	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.015 U	0.017 U	0.016 U	0.018 U	0.016 U
Pentachlorophenol**	0.10	1.7 U	1.9 U	1.9 U	2.1 U	1.9 U
Phenol	100	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
1,2,4-Trichlorobenzene	53	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U
2,4,5-Trichlorophenol	26	0.71 U	0.79 U	0.77 U	0.85 U	0.77 U
2,4,6-Trichlorophenol **	0.07	0.36 U	0.39 U	0.39 U	0.42 U	0.39 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier I evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SP35-001	SP35-002	SP35-003	SP37-001	SP37-002		
Compound/Analyte	Level (mg/kg)	1-2	6-7	12-13	1-2	8-9		
		PAHs	(mg/kg)					
Acenaphthene	2,900	0.11	0.03 U	0.029 U	0.13	0.029 U		
Acenaphthylene +	120	0.082	0.03 U	0.029 U	0.074	0.029 U		
Anthracene	59,000	0.15	0.03 U	0.029 U	0.33	0.029 U		
Benzo(a)anthracene	8	0.19	0.064	0.029 U	0.17	0.029 U		
Benzo(b)fluoranthene	25	0.47	0.041	0.029 U	0.38	0.029 U		
Benzo(k)fluoranthene	250	0.53	0.056	0.029 U	0.87	0.029 U		
Benzo(g,h,i)perylene +	160,000	0.57	0.037	0.029 U	0.35	0.029 U		
Benzo(a)pyrene	82	0.33	0.072	0.029 U	0.32	0.029 U		
Chrysene	800	0.71	0.066	0.029 U	1.1	0.029 U		
Dibenzo(a,h)anthracene	7.6	0.076	0.03 U	0.029 U	0.19	0.029 U		
Fluoranthene	21,000	0.55	0.074	0.029 U	2	0.029 U		
Fluorene	2,800	0.086	0.03 U	0.029 U	0.12	0.029 U		
Indeno(1,2,3-cd)pyrene	69	0.18	0.036	0.029 U	0.36	0.029 U		
Naphthalene	18	0.16	0.03 U	0.029 U	0.18	0.056		
Phenanthrene +	1,100	0.7	0.03 U	0.029 U	1	0.029 U		
Pyrene	21,000	0.63	0.074	0.029 U	2.1	0.029 U		
			(mg/kg)					
Aroclor 1016		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U		
Aroclor 1221		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U		
Aroclor 1232		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U		
Aroclor 1242		8.5	0.095 U	0.095 U	0.1 U	0.092 U		
Aroclor 1248		0.086 U	0.095 U	0.095 U	0.1 U	0.092 U		
Aroclor 1254		6	0.19 U	0.19 U	0.2 U	0.18 U		
Aroclor 1260		0.17 U	0.19 U	0.19 U	0.2 U	0.18 U		
Total PCBs		15.014	0.855 U	0.855 U	0.900 U	0.820 U		
	i i		and Total Cyanide					
Antimony*	20	6.5 J	1.1 UJ	1.1 UJ	1.2 UJ	0.97 UJ		
Arsenic*	120	20	5.8 J	12 J	7.2	15 J		
Barium*	1,800	520 J	98 J	89 J	120 J	98 J		
Beryllium*	130,000	1.4	0.83	1.1	1.1	1.2		
Cadmium*	590	8.1	0.56 U	0.56 U	0.72	0.53		
Chromium ***	21	320 J	11 J	20 J	19 J	20 J		
Copper*	330,000	480 J	11 J	30 J	28 J	38 J		
Lead**		1400 J	36	25	61 J	22		
Mercury*	32	2.6	0.14	0.024 U	0.33	0.026 U		
Nickel*	14,000	210 J	12 J	35 J	26 J	38 J		
Selenium*	1.3	0.99 U	1.1 U	1.1 U	1.2 U	0.97 U		
Silver ***	39	1	1.1 U	1.1 U	1.2 U	0.97 U		
Thallium*	34	1.3	2	2.2	2	2		
Zinc*	32,000	1600 J	40 J	49 J	73 J	46 J		
Total Cyanide*	120	0.28 U	0.29 U	0.24 U	0.35 U	0.25 U		

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3) \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used. (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead
- (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (10) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- (11) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SP37-003	SB38-001	SP39-001	SP39-002	SP39-003
Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11
		TCL Volat	iles (mg/kg)			
Acetone	16	0.066 J	0.12 J	0.036 U	0.11	0.047 U
Benzene	0.17	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromodichloromethane	0.6	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromoform	0.8	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Bromomethane	1.2	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
2-Butanone		0.023 U	0.029 UJ	0.014 U	0.027	0.019 U
Carbon Disulfide	160	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Carbon Tetrachloride	0.33	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chlorobenzene	6.5	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chloroethane +	70	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Chloroform	2.9	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Chloromethane +	0.68	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Dibromochloromethane	0.4	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1-Dichloroethane	110	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,2-Dichloroethane	0.1	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1-Dichloroethene	0.3	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
cis-1,2-Dichloroethene	1.1	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
trans-1,2-Dichloroethene	3.4	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,2-Dichloropropane	0.15	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
cis-1,3-Dichloropropene	0.02	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
trans-1,3-Dichloropropene	0.02	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Ethylbenzene	19	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
2-Hexanone +	1.3	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
4-Methyl-2-Pentanone		0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Methylene Chloride	0.2	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1,2,2-Tetrachloroethane +	3.3	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Tetrachloroethene	0.3	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Toluene	29	0.012 U	0.014 UJ	0.008	0.013 U	0.0094 U
1,1,1-Trichloroethane	9.6	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
1,1,2-Trichloroethane	0.3	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Trichloroethene	0.3	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Vinyl Chloride	0.07	0.023 U	0.029 UJ	0.014 U	0.026 U	0.019 U
m,p-Xylene*	150	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
o-Xylene*	150	0.012 U	0.014 UJ	0.0071 U	0.013 U	0.0094 U
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) J Indicates an estimated value.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample l	Location and Dept	h (feet below grou	nd surface)/Conce	ntration
	Screening	SP37-003	SB38-001	SP39-001	SP39-002	SP39-003
Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11
		TCL Semivol	atiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Bis(2-chloroethyl)ether**	0.0004	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Bis(2-ethylhexyl)phthalate	31,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
4-Bromophenyl phenyl ether		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Butyl benzyl phthalate	930	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Carbazole	2.8	0.38 U	0.53	1.7 U	0.4 U	0.38 U
4-Chloro-3-methylphenol +	120	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
4-Chloroaniline **	0.7	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2-Chloronaphthalene		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2-Chlorophenol **	1.5	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
4-Chlorophenyl phenyl ether		0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Dibenzofuran +	76	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
1,2-Dichlorobenzene	43	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
1,3-Dichlorobenzene + **	1.0	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
1,4-Dichlorobenzene	11	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
3,3´-Dichlorobenzidine**	0.033	0.75 U	0.83 U	3.5 U	0.8 U	0.77 U
2,4-Dichlorophenol **	0.48	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Diethyl phthalate	470	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Dimethyl phthalate +	380	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Di-n-butyl phthalate	2,300	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2,4-Dimethylphenol	9	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
4,6-Dinitro-2-methylphenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U
2,4-Dinitrophenol**	0.2	1.8 U	2 U	8.4 U	1.9 U	1.9 U
2,4-Dinitrotoluene**	0.0008	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2,6-Dinitrotoluene**	0.0007	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Di-n-octyl phthalate	10,000	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Hexachlorobenzene	11	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Hexachlorobutadiene +	15	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Hexachlorocyclopentadiene	2,200	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Hexachloroethane	2.6	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
Isophorone	8	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2-Methylnaphthalene +	39	0.38 U	1.7	1.7 U	0.4 U	0.38 U
2-Methylphenol	15	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
4-Methylphenol ++	0.66	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2-Nitroaniline		1.8 U	2 U	8.4 U	1.9 U	1.9 U
3-Nitroaniline		1.8 U	2 U	8.4 U	1.9 U	1.9 U
4-Nitroaniline		1.8 U	2 U	8.4 U	1.9 U	1.9 U
Nitrobenzene**	0.1	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2-Nitrophenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U
4-Nitrophenol		1.8 U	2 U	8.4 U	1.9 U	1.9 U
N-Nitrosodi-n-propylamine**	0.00005	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
N-Nitrosodiphenylamine	5.6	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.018 U	0.074 U	0.017 U	0.016 U
Pentachlorophenol**	0.10	1.8 U	2 U	8.4 U	1.9 U	1.9 U
Phenol	100	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
1,2,4-Trichlorobenzene	53	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U
2,4,5-Trichlorophenol	26	0.75 U	0.83 U	3.5 U	0.8 U	0.77 U
2,4,6-Trichlorophenol **	0.07	0.38 U	0.42 U	1.7 U	0.4 U	0.38 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) **Values exceeded TACO or non-TACO screening level but were consistently non-detect so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier I evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Compound/Analyte							
Compound/Analyte		11 11-					
PAHs (mg/kg) Acenaphthene 2,900 0.028 U 0.42 1.3 U 0.056 0.0 Anthracene 59,000 0.028 U 0.42 1.3 U 0.03 U 0.0 Anthracene 59,000 0.028 U 1.7 1.3 U 0.29 0.0 Benzo(a)anthracene 8 0.028 U 1.7 1.3 U 0.13 0.0 Benzo(b)fluoranthene 25 0.028 U 1.1 1.3 U 0.58 0.0 Benzo(b)fluoranthene 250 0.028 U 0.96 1.3 U 0.65 0.0 Benzo(b)fluoranthene 250 0.028 U 0.96 1.3 U 0.65 0.0 Benzo(b)fluoranthene 250 0.028 U 0.96 1.3 U 0.65 0.0 Benzo(g)h.jperylene + 160.000 0.028 U 0.46 1.3 U 0.31 0.0 Benzo(g)h.jperylene + 82 0.028 U 0.89 1.3 U 0.64 0.0 Benzo(a)h.jperylene 82 0.028 U 0.89 1.3 U 0.64 0.0 Chrysene 800 0.028 U 0.23 1.3 U 1.1 0.0 Dibenzo(a,h)anthracene 7.6 0.028 U 0.15 1.3 U 0.23 0.0 Fluoranthene 21,000 0.028 U 4.1 1.3 U 1.6 0.0 Fluorene 2,800 0.028 U 0.7 1.3 U 0.056 0.0 Indeno(1,2,3-cd)pyrene 69 0.028 U 0.7 1.3 U 0.056 0.0 Indeno(1,2,3-cd)pyrene 69 0.028 U 0.7 1.3 U 0.050 0.0 Indeno(1,2,3-cd)pyrene 18 0.028 U 2 1.3 U 0.032 0.0 Phenanthrene + 1,100 0.028 U 5.7 1.3 U 0.032 0.0 Phyrene 21,000 0.028 U 4.7 2 1.7 0.0 Pyrene 21,000 0.028 U 4.7 2 1.7 0.0 PCBs (mg/kg) Aroclor 1016 0.092 U 0.1 U 0.087 U 0.1 U 0.0 Aroclor 1242 0.092 U 0.1 U 0.087 U 0.1 U 0.0 Aroclor 1248 0.092 U 0.1 U 0.087 U 0.1 U 0.0 Aroclor 1248 0.092 U 0.1 U 0.087 U 0.1 U 0.0 Aroclor 1254 0.18 U 0.2 U 0.17 U 0.2 U 0.1 Aroclor 1260 0.18 U 0.2 U 0.17 U 0.2 U 0.0 Aroclor 1260 0.18 U 0.2 U 0.17 U 0.2 U 0.0 Aroclor 1261 0.092 U 0.1 U 0.087 U 0.1 U 0.0 Aroclor 1262 0.18 U 0.2 U 0.17 U 0.2 U 0.0 Aroclor 1264 0.18 U 0.2 U 0.17 U 0.2 U 0.0 Aroclor 1264 0.18 U 0.2 U 0.17 U 0.2 U 0.0 Aroclor 1264 0.909 U							SP39-003
Acenaphthene	Compound/Analyte	Level (mg/kg)	12-13	5-7	1-2	5-6	10-11
Acenaphthylene + 120			PAHs	(mg/kg)			
Anthracene	Acenaphthene	2,900			1.3 U	0.056	0.029 U
Benzo(a)anthracene			0.028 U				0.029 U
Benzo(b)fluoranthene	Anthracene	59,000		1.7	1.3 U	0.29	0.03
Benzo(k)fluoranthene	Benzo(a)anthracene		0.028 U		1.3 U		0.029 U
Benzo(g,h.i)perylene + 160,000 0.028 U 0.46 1.3 U 0.31 0.00	Benzo(b)fluoranthene	_	0.028 U	1.1	1.3 U	0.58	0.029 U
Benzo(a)pyrene 82 0.028 U 0.89 1.3 U 0.64 0.00	Benzo(k)fluoranthene						0.029 U
Chrysene							0.029 U
Dibenzo(a,h)anthracene	Benzo(a)pyrene			0.89		0.64	0.029 U
Fluoranthene 21,000 0.028 U 4.1 1.3 U 1.6 0.00 Fluorene 2,800 0.028 U 0.7 1.3 U 0.056 0.00 Indeno(1,2,3-cd)pyrene 69 0.028 U 0.38 1.3 U 0.3 U 0.03 Septimorphise 18 0.028 U 2 1.3 U 0.032 0.00 Phenanthrene +			0.028 U				0.056
Fluorene 2,800 0.028 U 0.7 1.3 U 0.056 0.00 Indeno(1,2,3-cd)pyrene 69 0.028 U 0.38 1.3 U 0.3 U 0.00 Naphthalene 18 0.028 U 2 1.3 U 0.032 0.00 Phenanthrene +	\ / /						0.029 U
Indeno(1,2,3-cd)pyrene	Fluoranthene	21,000	0.028 U		1.3 U	1.6	0.081
Naphthalene		2,800	0.028 U	0.7	1.3 U		0.029 U
Phenanthrene +	Indeno(1,2,3-cd)pyrene		0.028 U	0.38	1.3 U	0.3 U	0.029 U
Pyrene	Naphthalene		0.028 U				0.029 U
PCBs (mg/kg) Aroclor 1016 0.092 U 0.1 U 0.087 U 0.1 U 0.097 U 0.097 U 0.1 U 0	Phenanthrene +		0.028 U				0.071
Aroclor 1016	Pyrene	21,000			2	1.7	0.076
Aroclor 1221				(mg/kg)			
Arcolor 1232							0.095 U
Aroclor 1242							0.095 U
Arcolor 1248	Aroclor 1232						0.095 U
Arcolor 1254	Aroclor 1242					0.1 U	0.14
Aroclor 1260	Aroclor 1248		0.092 U	0.1 U		0.1 U	0.095 U
Total PCBs			0.18 U	0.2 U		0.2 U	0.19 U
Priority Pollutant Metals and Total Cyanide (mg/kg) Antimony*	Aroclor 1260						0.19 U
Antimony* 20 1.2 UJ 1.3 UJ 1.1 UJ 6 J Arsenic* 120 7.7 J 7.7 J 1.7 J 10 J 8 Barium* 1,800 85 J 49 J 57 J 140 J 3 Beryllium* 130,000 1.1 1.1 0.59 1.1 1 Cadmium* 590 0.59 U 0.69 0.95 1 0. Chromium *** 21 19 J 22 J 5.6 J 11 J 1 Copper* 330,000 25 J 33 J 9.1 J 59 J 59 J Lead** 17 40 23 J 970 970 Mercury* 32 0.029 U 0.051 0.025 U 6.2 0.00 Nickel* 14,000 25 J 28 J 8.8 J 13 J 3 Selenium* 1.3 1.2 U 1.3 U 1.1 U 1.1 U 1.1 U	Total PCBs					0.900 U	0.900
Arsenic* 120 7.7 J 7.7 J 1.7 10 J 8 Barium* 1,800 85 J 49 J 57 J 140 J 3 Beryllium* 130,000 1.1 1.1 0.59 1.1 1 Cadmium* 590 0.59 U 0.69 0.95 1 0. Chromium *** 21 19 J 22 J 5.6 J 11 J 1 Copper* 330,000 25 J 33 J 9.1 J 59 J 59 J Lead** 17 40 23 J 970 970 Mercury* 32 0.029 U 0.051 0.025 U 6.2 0.00 Nickel* 14,000 25 J 28 J 8.8 J 13 J 3 Selenium* 1.3 1.2 U 1.3 U 1.1 U 1.1 U 1.1 U		Priority	Pollutant Metals	and Total Cyanide	(mg/kg)		
Barium* 1,800 85 J 49 J 57 J 140 J Beryllium* 130,000 1.1 1.1 0.59 1.1 1 Cadmium* 590 0.59 U 0.69 0.95 1 0. Chromium *** 21 19 J 22 J 5.6 J 11 J 1 Copper* 330,000 25 J 33 J 9.1 J 59 J 59 J Lead** 17 40 23 J 970 970 Mercury* 32 0.029 U 0.051 0.025 U 6.2 0.00 Nickel* 14,000 25 J 28 J 8.8 J 13 J 3 Selenium* 1.3 1.2 U 1.3 U 1.1 U 1.1 U 1.1 U	,			1.3 UJ			1 UJ
Beryllium* 130,000 1.1 1.1 0.59 1.1 1 Cadmium* 590 0.59 U 0.69 0.95 1 0. Chromium *** 21 19 J 22 J 5.6 J 11 J 1 Copper* 330,000 25 J 33 J 9.1 J 59 J 59 J Lead** 17 40 23 J 970 970 Mercury* 32 0.029 U 0.051 0.025 U 6.2 0.00 Nickel* 14,000 25 J 28 J 8.8 J 13 J 3 Selenium* 1.3 1.2 U 1.3 U 1.1 U 1.1 U 1.1 U		120		7.7 J		10 J	8.1 J
Cadmium* 590 0.59 U 0.69 0.95 1 0. Chromium *** 21 19 J 22 J 5.6 J 11 J Copper* 330,000 25 J 33 J 9.1 J 59 J Lead** 17 40 23 J 970 Mercury* 32 0.029 U 0.051 0.025 U 6.2 0.00 Nickel* 14,000 25 J 28 J 8.8 J 13 J 3 Selenium* 1.3 1.2 U 1.3 U 1.1 U 1.1 U 1.1 U							83 J
Chromium *** 21 19 J 22 J 5.6 J 11 J Copper* 330,000 25 J 33 J 9.1 J 59 J Lead** 17 40 23 J 970 Mercury* 32 0.029 U 0.051 0.025 U 6.2 0.0 Nickel* 14,000 25 J 28 J 8.8 J 13 J 3 Selenium* 1.3 1.2 U 1.3 U 1.1 U 1.1 U 1.1 U	·						1.1
Copper* 330,000 25 J 33 J 9.1 J 59 J Lead** 17 40 23 J 970 Mercury* 32 0.029 U 0.051 0.025 U 6.2 0.0 Nickel* 14,000 25 J 28 J 8.8 J 13 J Selenium* 1.3 1.2 U 1.3 U 1.1 U 1.1 U	Cadmium*	590	0.59 U	0.69	0.95	1	0.51 U
Lead** 17 40 23 J 970 Mercury* 32 0.029 U 0.051 0.025 U 6.2 0.00 Nickel* 14,000 25 J 28 J 8.8 J 13 J 3 Selenium* 1.3 1.2 U 1.3 U 1.1 U 1.1 U 1.1 U	Chromium ***	21	19 J	22 J	5.6 J	11 J	19 J
Mercury* 32 0.029 U 0.051 0.025 U 6.2 0.00 Nickel* 14,000 25 J 28 J 8.8 J 13 J 3 Selenium* 1.3 1.2 U 1.3 U 1.1 U 1.1 U 1.1 U	Copper*	330,000	25 J	33 J	9.1 J	59 J	30 J
Mercury* 32 0.029 U 0.051 0.025 U 6.2 0.00 Nickel* 14,000 25 J 28 J 8.8 J 13 J 3 Selenium* 1.3 1.2 U 1.3 U 1.1 U 1.1 U 1.1 U	Lead**		17	40	23 J	970	19
Selenium* 1.3 1.2 U 1.3 U 1.1 U 1.1 U		32	0.029 U	0.051	0.025 U	6.2	0.027
	Nickel*	14,000	25 J	28 J	8.8 J	13 J	29 J
00 10 11 11 11 11 11	Selenium*	1.3	1.2 U	1.3 U	1.1 U	1.1 U	1 U
Silver *** 39 1.2 U 1.3 U 1.1 U 1.1 U	Silver ***	39	1.2 U	1.3 U	1.1 U	1.1 U	1 U
Thallium* 34 1.8 1.5 1.4 1.6 1	Thallium*	34	1.8	1.5	1.4	1.6	1.9
Zinc* 32,000 37 J 88 J 33 J 200 J	Zinc*	32,000	37 J	88 J	33 J	200 J	40 J
Total Cyanide* 120 0.31 U 0.33 U 0.28 U 0.31 U 0	Total Cyanide*	120	0.31 U	0.33 U	0.28 U	0.31 U	0.3 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- (7) J Indicates an estimated value.
- (8) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used. (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead
- (9) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (10) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- $(11) + Screening\ level\ obtained\ from\ Table\ A: Soil\ Remediation\ Objectives\ for\ Residential\ Properties,\ Non-TACO\ Chemicals\ (Illinois\ EPA\ 2004).$
- (12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	and surface)/Conce	entration
	Screening	SP40-002	SP40-003	SP43-001	SP43-002	SP43-003
Compound/Analyte	Level (mg/kg)	7-8	14-15	2-3	3.5-4.5	11-12
		TCL Volat	iles (mg/kg)			
Acetone	16	0.071	0.043 U	0.15	0.063 U	0.041 U
Benzene	0.17	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromodichloromethane	0.6	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromoform	0.8	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Bromomethane	1.2	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
2-Butanone		0.02 U	0.017 U	0.031	0.025 U	0.017 U
Carbon Disulfide	160	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Carbon Tetrachloride	0.33	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chlorobenzene	6.5	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chloroethane +	70	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Chloroform	2.9	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Chloromethane +	0.68	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Dibromochloromethane	0.4	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1-Dichloroethane	110	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,2-Dichloroethane	0.1	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1-Dichloroethene	0.3	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
cis-1,2-Dichloroethene	1.1	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
trans-1,2-Dichloroethene	3.4	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,2-Dichloropropane	0.15	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
cis-1,3-Dichloropropene	0.02	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
trans-1,3-Dichloropropene	0.02	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Ethylbenzene	19	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
2-Hexanone +	1.3	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
4-Methyl-2-Pentanone		0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Methylene Chloride	0.2	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	NA
Styrene	18	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,2,2-Tetrachloroethane +	3.3	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Tetrachloroethene	0.3	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Toluene	29	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,1-Trichloroethane	9.6	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
1,1,2-Trichloroethane	0.3	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Trichloroethene	0.3	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Vinyl Chloride	0.07	0.02 U	0.017 U	0.027 U	0.025 U	0.017 U
m,p-Xylene*	150	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
o-Xylene*	150	0.01 U	0.0087 U	0.013 U	0.013 U	0.0083 U
Xylenes, Total	150	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			h (feet below grou		
	Screening	SP40-002	SP40-003	SP43-001	SP43-002	SP43-003
Compound/Analyte	Level (mg/kg)	7-8	14-15	2-3	3.5-4.5	11-12
		TCL Semivol	atiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Bis(2-chloroethyl)ether**	0.0004	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Bromophenyl phenyl ether		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Butyl benzyl phthalate	930	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Carbazole	2.8	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Chloro-3-methylphenol +	120	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Chloroaniline	0.7	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Chloronaphthalene		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Chlorophenol	1.5	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Chlorophenyl phenyl ether		0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Dibenzofuran +	76	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
1,2-Dichlorobenzene	43	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
1,3-Dichlorobenzene +	1.0	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
1,4-Dichlorobenzene	11	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
3,3'-Dichlorobenzidine**	0.033	0.77 U	0.77 U	0.85 U	0.78 U	0.78 U
2,4-Dichlorophenol	0.48	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Diethyl phthalate	470	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Dimethyl phthalate +	380	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Di-n-butyl phthalate	2,300	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2,4-Dimethylphenol	9	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4,6-Dinitro-2-methylphenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
2,4-Dinitrophenol**	0.2	1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
2,4-Dinitrotoluene**	0.0008	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2,6-Dinitrotoluene**	0.0007	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Di-n-octyl phthalate	10,000	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Hexachlorobenzene	11	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Hexachlorobutadiene +	15	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Hexachlorocyclopentadiene	2,200	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Hexachloroethane	2.6	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
Isophorone	8	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Methylnaphthalene +	39	0.39 U	0.39 U	0.43 U	1.6	0.39 U
2-Methylphenol	15	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
4-Methylphenol ++	0.66	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Nitroaniline		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
3-Nitroaniline		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
4-Nitroaniline		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
Nitrobenzene**	0.1	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2-Nitrophenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
4-Nitrophenol		1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
N-Nitrosodi-n-propylamine**	0.00005	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
N-Nitrosodiphenylamine	5.6	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.018 U	0.016 U	0.016 U
Pentachlorophenol**	0.10	1.9 U	1.9 U	2.1 U	1.9 U	1.9 U
Phenol	100	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
1,2,4-Trichlorobenzene	53	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U
2,4,5-Trichlorophenol	26	0.77 U	0.77 U	0.85 U	0.78 U	0.78 U
2,4,6-Trichlorophenol **	0.07	0.39 U	0.39 U	0.43 U	0.39 U	0.39 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier I evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Location and Dept			
	Screening	SP40-002	SP40-003	SP43-001	SP43-002	SP43-003
Compound/Analyte	Level (mg/kg)	7-8	14-15	2-3	3.5-4.5	11-12
		PAHs	(mg/kg)			
Acenaphthene	2,900	0.029 U	0.029 U	0.072	0.062	0.029 U
Acenaphthylene +	120	0.029 U	0.029 U	0.17	0.074	0.029 U
Anthracene	59,000	0.029 U	0.029 U	0.032 U	0.029	0.029 U
Benzo(a)anthracene	8	0.029 U	0.029 U	0.045	0.09	0.029 U
Benzo(b)fluoranthene	25	0.029 U	0.029 U	0.12	0.13	0.029 U
Benzo(k)fluoranthene	250	0.029 U	0.029 U	0.098	0.11	0.029 U
Benzo(g,h,i)perylene +	160,000	0.029 U	0.029 U	0.062	0.087	0.029 U
Benzo(a)pyrene	82	0.029 U	0.029 U	0.056	0.13	0.029 U
Chrysene	800	0.029 U	0.029 U	0.3	0.16	0.029 U
Dibenzo(a,h)anthracene	7.6	0.029 U	0.029 U	0.032 U	0.038	0.029 U
Fluoranthene	21,000	0.029 U	0.029 U	0.15	0.17	0.029 U
Fluorene	2,800	0.029 U	0.029 U	0.032 U	0.16	0.029 U
Indeno(1,2,3-cd)pyrene	69	0.029 U	0.029 U	0.043	0.076	0.029 U
Naphthalene	18	0.029 U	0.029 U	0.062	0.22	0.029 U
Phenanthrene +	1,100	0.029 U	0.029 U	0.19	0.38	0.029 U
Pyrene	21,000	0.029 U	0.029 U	0.14	0.088	0.029 U
		PCBs ((mg/kg)			
Aroclor 1016		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U
Aroclor 1221		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U
Aroclor 1232		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U
Aroclor 1242		0.093 U	0.094 U	0.1 U	0.28	0.097 U
Aroclor 1248		0.093 U	0.094 U	0.1 U	0.099 U	0.097 U
Aroclor 1254		0.19 U	0.19 U	0.21 U	0.26	0.19 U
Aroclor 1260		0.19 U	0.19 U	0.21 U	0.2 U	0.19 U
Total PCBs		0.845 U	0.850 U	0.920 U	1.136	0.865 U
		Pollutant Metals	and Total Cyanide	(mg/kg)		
Antimony*	20	1.1 UJ	1 UJ	1.3 UJ	NA	1 UJ
Arsenic*	120	10 J	8.3 J	9.5	NA	9 J
Barium*	1,800	88 J	87 J	170 J	NA	91 J
Beryllium*	130,000	1.1	1.1	1.2	NA	1.1
Cadmium*	590	0.56 U	0.52 U	0.85	NA	0.5 U
Chromium ***	21	16 J	19 J	16 J	NA	21 J
Copper*	330,000	33 J	28 J	73 J	NA	30 J
Lead**		19	17	69 J	NA	19
Mercury*	32	0.029 U	0.028 U	0.18	NA	0.03 U
Nickel*	14,000	36 J	28 J	20 J	NA	33 J
Selenium*	1.3	1.1 U	1 U	1.3 U	NA	1 U
Silver ***	39	1.1 U	1 U	1.3 U	NA	1 U
Thallium*	34	2.2	1.9	1.9	NA	1.9
Zinc*	32,000	52 J	45 J	100 J	NA	46 J
Total Cyanide*	120	0.32 U	0.27 U	0.35 U	NA	0.27 U

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- (7) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used.
- (8) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (9) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- (10) NA Not analyzed.
- (11) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	and surface)/Conce	entration
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12
		TCL Vola	tiles (mg/kg)			
Acetone	16	0.079 U	0.082	0.069 U	0.065	0.036 U
Benzene	0.17	0.016 U	0.0089 U	0.014 U	0.12	0.0073 U
Bromodichloromethane	0.6	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Bromoform	0.8	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Bromomethane	1.2	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
2-Butanone		0.031 U	0.018 U	0.028 U	0.034	0.015 U
Carbon Disulfide	160	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Carbon Tetrachloride	0.33	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Chlorobenzene	6.5	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Chloroethane +	70	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
Chloroform	2.9	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Chloromethane +	0.68	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Dibromochloromethane	0.4	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,1-Dichloroethane	110	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,2-Dichloroethane	0.1	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,1-Dichloroethene	0.3	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
cis-1,2-Dichloroethene	1.1	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
trans-1,2-Dichloroethene	3.4	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,2-Dichloropropane	0.15	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
cis-1,3-Dichloropropene	0.02	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
trans-1,3-Dichloropropene	0.02	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Ethylbenzene	19	0.016 U	0.0089 U	0.014 U	0.37	0.0073 U
2-Hexanone +	1.3	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
4-Methyl-2-Pentanone		0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
Methylene Chloride	0.2	0.031 U	0.018 U	0.028 U	0.019 U	0.015 U
Methyl tert-butyl ether	0.32	NA	NA	NA	NA	0.0073 U
Styrene	18	0.016 U	0.0089 U	0.014 U	0.014	0.0073 U
1,1,2,2-Tetrachloroethane +	3.3	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Tetrachloroethene	0.3	0.023	0.0089 U	0.014 U	0.0094 U	0.0073 U
Toluene	29	0.016 U	0.0089 U	0.014 U	0.025	0.0073 U
1,1,1-Trichloroethane	9.6	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
1,1,2-Trichloroethane	0.3	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Trichloroethene	0.3	0.016 U	0.0089 U	0.014 U	0.0094 U	0.0073 U
Vinyl Chloride	0.07	0.031 U	0.018 U	0.028 U	0.019 U	0.0073 U
m,p-Xylene*	150	0.016 U	0.0089 U	0.014 U	0.057	NA
o-Xylene*	150	0.016 U	0.0089 U	0.014 U	0.17	NA
Xylenes, Total	150	NA	NA	NA	NA	0.015 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001		
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12		
		TCL Semivo	latiles (mg/kg)					
Bis(2-chloroethoxy)methane		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Bis(2-chloroethyl)ether**	0.0004	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Bis(2-ethylhexyl)phthalate	31,000	9.7	0.4 U	0.39 U	2.1	0.43 U		
4-Bromophenyl phenyl ether		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Butyl benzyl phthalate	930	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Carbazole	2.8	1.9 U	0.4 U	0.39 U	0.87	0.87		
4-Chloro-3-methylphenol +	120	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
4-Chloroaniline **	0.7	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2-Chloronaphthalene		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2-Chlorophenol **	1.5	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
4-Chlorophenyl phenyl ether		1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Dibenzofuran +	76	1.9 U	0.4 U	0.39 U	0.35 U	1.8		
1,2-Dichlorobenzene	43	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
1,3-Dichlorobenzene + **	1.0	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
1,4-Dichlorobenzene	11	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
3,3´-Dichlorobenzidine**	0.033	3.9 U	0.79 U	0.77 U	0.69 U	0.86 U		
2,4-Dichlorophenol **	0.48	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Diethyl phthalate	470	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Dimethyl phthalate +	380	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Di-n-butyl phthalate	2,300	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2,4-Dimethylphenol	9	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
4,6-Dinitro-2-methylphenol		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
2,4-Dinitrophenol**	0.2	9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
2,4-Dinitrotoluene**	0.0008	1.9 U	0.4 U	0.39 U	0.35 U	0.22 U		
2,6-Dinitrotoluene**	0.0007	1.9 U	0.4 U	0.39 U	0.35 U	0.22 U		
Di-n-octyl phthalate	10,000	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Hexachlorobenzene	11	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Hexachlorobutadiene +	15	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Hexachlorocyclopentadiene	2,200	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Hexachloroethane	2.6	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
Isophorone	8	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2-Methylnaphthalene +	39	1.9 U	0.4 U	0.39 U	1.7	2.8		
2-Methylphenol	15	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
4-Methylphenol ++	0.66	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2-Nitroaniline		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
3-Nitroaniline		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
4-Nitroaniline		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
Nitrobenzene**	0.1	1.9 U	0.4 U	0.39 U	0.35 U	0.22 U		
2-Nitrophenol		9.4 U	1.9 U	1.9 U	1.7 U	0.43 U		
4-Nitrophenol		9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
N-Nitrosodi-n-propylamine**	0.00005	1.9 U	0.4 U	0.39 U	0.35 U	0.22 U		
N-Nitrosodiphenylamine	5.6	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2, 2'-Oxybis(1-Chloropropane)		0.082 U	0.017 U	0.016 U	0.015 U	0.43 U		
Pentachlorophenol**	0.10	9.4 U	1.9 U	1.9 U	1.7 U	2.1 U		
Phenol	100	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
1,2,4-Trichlorobenzene	53	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		
2,4,5-Trichlorophenol	26	3.9 U	0.79 U	0.77 U	0.69 U	0.86 U		
2,4,6-Trichlorophenol **	0.07	1.9 U	0.4 U	0.39 U	0.35 U	0.43 U		

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) **Values exceeded TACO or non-TACO screening level but were consistently non-detect so no values were shaded. (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration					
	Screening	SP44-001	SP44-002	SP44-003	SB45-001	SB46-001	
Compound/Analyte	Level (mg/kg)	0-0.5	6-7	12-13	0-0.5	10-12	
		PAHs	(mg/kg)				
Acenaphthene	2,900	0.15 U	0.03 U	0.029 U	0.74	4.9	
Acenaphthylene +	120	0.15 U	0.03 U	0.029 U	0.65	0.73	
Anthracene	59,000	0.16	0.03 U	0.029 U	1.9	6.4	
Benzo(a)anthracene	8	0.15 U	0.03 U	0.029 U	2.5	5.8	
Benzo(b)fluoranthene	25	0.78	0.03 U	0.029 U	2	4.5	
Benzo(k)fluoranthene	250	0.81	0.03 U	0.029 U	1.9	4.1	
Benzo(g,h,i)perylene +	160,000	1.1	0.03 U	0.029 U	1.3	2.7	
Benzo(a)pyrene	82	0.45	0.03 U	0.029 U	2.4	5.9	
Chrysene	800	0.83	0.03 U	0.029 U	3.9	5.4	
Dibenzo(a,h)anthracene	7.6	0.25	0.03 U	0.029 U	0.37	0.83	
Fluoranthene	21,000	0.45	0.03 U	0.029 U	4.1	13	
Fluorene	2,800	0.15 U	0.03 U	0.029 U	1.2	3.8	
Indeno(1,2,3-cd)pyrene	69	0.69	0.03 U	0.029 U	0.94	2.4	
Naphthalene	18	0.15 U	0.03 U	0.029 U	1.8	6.5	
Phenanthrene +	1,100	0.42	0.03 U	0.029 U	3.6	17	
Pyrene	21,000	0.64	0.03 U	0.029 U	6.8	14	
		PCBs (mg/kg)					
Aroclor 1016		0.094 U	0.096 U	0.093 U	0.084 U	NA	
Aroclor 1221		0.094 U	0.096 U	0.093 U	0.084 U	NA	
Aroclor 1232		0.094 U	0.096 U	0.093 U	0.084 U	NA	
Aroclor 1242		1.5	0.096 U	0.093 U	5.2 U	NA	
Aroclor 1248		0.094 U	0.096 U	0.093 U	0.084 U	NA	
Aroclor 1254		1	0.19 U	0.19 U	5.2 U	NA	
Aroclor 1260		0.19 U	0.19 U	0.19 U	0.17 U	NA	
Total PCBs		3.066	0.860 U	0.845 U	10.906 U	NA	
		t Metals and Total	Cyanide (mg/kg)				
Antimony*	20	0.98 J	1.1 UJ	1.2 UJ	0.95 UJ	NA	
Arsenic*	120	3.8	13 J	9.3 J	7.6	NA	
Barium*	1,800	140 J	79 J	94 J	59 J	NA	
Beryllium*	130,000	1.1	1.2	1.2	0.63	NA	
Cadmium*	590	1.5	0.57 U	0.58 U	1.1	NA	
Chromium ***	21	21 J	20 J	20 J	13 J	NA	
Copper*	330,000	79 J	31 J	33 J	42 J	NA	
Lead**		210 J	19	20	240 J	NA	
Mercury*	32	0.38	0.03 U	0.026 U	0.3	NA	
Nickel*	14,000	16 J	39 J	35 J	17 J	NA	
Selenium*	1.3	0.94 U	1.1 U	1.2 U	0.95 U	NA	
Silver ***	39	0.94 U	1.1 U	1.2 U	0.95 U	NA	
Thallium*	34	1.3	1.8	2.3	0.95 U	NA	
Zinc*	32,000	290 J	52 J	45 J	140 J	NA	
Total Cyanide*	120	0.28 U	0.32 U	0.31 U	1.3	NA	

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U-Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) PCBs Polychlorinated Biphenyls.
- (6) J Indicates an estimated value.
- (7) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used.
- (8) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (9) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used. concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (10) NA Not analyzed.
- (11) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	and surface)/Conce	entration
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20
		TCL Volat	iles (mg/kg)			
Acetone	16	0.031 U	0.035 U	0.032 U	0.036 U	0.03 U
Benzene	0.17	0.0062 U	0.05	0.0065 U	0.0072 U	0.0059 U
Bromodichloromethane	0.6	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Bromoform	0.8	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Bromomethane	1.2	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
2-Butanone		0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Carbon Disulfide	160	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Carbon Tetrachloride	0.33	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Chlorobenzene	6.5	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Chloroethane +	70	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Chloroform	2.9	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Chloromethane +	0.68	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Dibromochloromethane	0.4	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1-Dichloroethane	110	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,2-Dichloroethane	0.1	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1-Dichloroethene	0.3	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
cis-1,2-Dichloroethene	1.1	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
trans-1,2-Dichloroethene	3.4	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,2-Dichloropropane	0.15	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
cis-1,3-Dichloropropene	0.02	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
trans-1,3-Dichloropropene	0.02	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Ethylbenzene	19	0.0062 U	0.33	0.0065 U	0.0072 U	0.0059 U
2-Hexanone +	1.3	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
4-Methyl-2-Pentanone		0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Methylene Chloride	0.2	0.012 U	0.014 U	0.013 U	0.014 U	0.012 U
Methyl tert-butyl ether	0.32	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Styrene	18	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1,2,2-Tetrachloroethane +	3.3	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Tetrachloroethene	0.3	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Toluene	29	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1,1-Trichloroethane	9.6	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
1,1,2-Trichloroethane	0.3	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Trichloroethene	0.3	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
Vinyl Chloride	0.07	0.0062 U	0.0071 U	0.0065 U	0.0072 U	0.0059 U
m,p-Xylene*	150	NA	NA	NA	NA	NA
o-Xylene*	150	NA	NA	NA	NA	NA
Xylenes, Total	150	0.012 U	0.26	0.013 U	0.014 U	0.012 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) -- Toxicity criteria not available for exposure route.
- (5) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (6) NA Not analyzed.
- (7) * The "total xylenes" screening level was used because it is more conservative.
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	1 (
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002		
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20		
		TCL Semivol	atiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
Bis(2-chloroethyl)ether**	0.0004	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
Bis(2-ethylhexyl)phthalate	31,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
4-Bromophenyl phenyl ether		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
Butyl benzyl phthalate	930	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
Carbazole	2.8	0.42 U	1.1	0.41 U	0.57	0.41 U		
4-Chloro-3-methylphenol +	120	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
4-Chloroaniline	0.7	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
2-Chloronaphthalene		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
2-Chlorophenol	1.5	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
4-Chlorophenyl phenyl ether		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
Dibenzofuran +	76	0.42 U	2.5	0.41 U	1.5	0.41 U		
1,2-Dichlorobenzene	43	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
1,3-Dichlorobenzene +	1.0	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
1,4-Dichlorobenzene	11	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
3,3'-Dichlorobenzidine**	0.033	0.83 U	0.88 U	0.82 U	0.89 U	0.82 U		
2,4-Dichlorophenol	0.48	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
Diethyl phthalate	470	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
Dimethyl phthalate +	380	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
Di-n-butyl phthalate	2,300	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
2,4-Dimethylphenol	9	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
4,6-Dinitro-2-methylphenol		2 U	2.1 U	2 U	2.2 U	2 U		
2,4-Dinitrophenol**	0.2	2 U	2.1 U	2 U	2.2 U	2 U		
2,4-Dinitrotoluene**	0.0008	0.21 U	0.23 U	0.21 U	0.23 U	0.21 U		
2,6-Dinitrotoluene**	0.0007	0.21 U	0.23 U	0.21 U	0.23 U	0.21 U		
Di-n-octyl phthalate	10,000	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
Hexachlorobenzene	11	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
Hexachlorobutadiene +	15	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
Hexachlorocyclopentadiene	2,200	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
Hexachloroethane	2.6	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
Isophorone	8	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
2-Methylnaphthalene +	39	0.42 U	27	0.41 U	2.5	1.1		
2-Methylphenol	15	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
4-Methylphenol ++	0.66	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
2-Nitroaniline		2 U	2.1 U	2 U	2.2 U	2 U		
3-Nitroaniline		2 U	2.1 U	2 U	2.2 U	2 U		
4-Nitroaniline		2 U	2.1 U	2 U	2.2 U	2 U		
Nitrobenzene**	0.1	0.21 U	0.23 U	0.21 U	0.23 U	0.21 U		
2-Nitrophenol		0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
4-Nitrophenol	0.00005	2 U	2.1 U	2 U	2.2 U	2 U		
N-Nitrosodi-n-propylamine**	0.00005	0.21 U	0.23 U	0.21 U	0.23 U	0.21 U		
N-Nitrosodiphenylamine	5.6	0.42 U 0.42 U	0.44 U 0.44 U	0.41 U 0.41 U	0.44 U	0.41 U 0.41 U		
2, 2'-Oxybis(1-Chloropropane)					0.44 U			
Pentachlorophenol**	0.10	2 U	2.1 U	2 U	2.2 U	2 U		
Phenol	100	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
1,2,4-Trichlorobenzene	53	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		
2,4,5-Trichlorophenol	26	0.83 U	0.88 U	0.82 U	0.89 U	0.82 U		
2,4,6-Trichlorophenol **	0.07	0.42 U	0.44 U	0.41 U	0.44 U	0.41 U		

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (8) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dept	th (feet below grou	ind surface)/Conce	entration
	Screening	SB46-002	SB47-001	SB47-002	SB48-001	SB48-002
Compound/Analyte	Level (mg/kg)	16 -18	12 - 14	16 -18	8 -10	18 - 20
		PAHs ((mg/kg)			
Acenaphthene	2,900	0.17	22	0.074	5.9	0.41
Acenaphthylene +	120	0.033	2.7	0.031 U	0.99	0.031 U
Anthracene	59,000	0.19	11	0.031 U	9.5	0.16
Benzo(a)anthracene	8	0.17	9	0.032	8.6	0.11
Benzo(b)fluoranthene	25	0.075	4.5	0.031 U	5.5	0.063
Benzo(k)fluoranthene	250	0.12	5.1	0.031 U	6.2	0.082
Benzo(g,h,i)perylene +	160,000	0.046	3.9	0.031 U	5.5	0.034
Benzo(a)pyrene	82	0.086	4.6	0.031 U	9.8	0.088
Chrysene	800	0.2	8	0.048	8.1	0.14
Dibenzo(a,h)anthracene	7.6	0.031 U	0.91	0.031 U	1.2	0.031 U
Fluoranthene	21,000	0.42	20	0.072	20	0.22
Fluorene	2,800	0.13	13	0.04	3.5	0.26
Indeno(1,2,3-cd)pyrene	69	0.035	2.5	0.031 U	4.2	0.031 U
Naphthalene	18	0.4	33	0.13	5.3	7.8
Phenanthrene +	1,100	0.6	43	0.12	21	0.52
Pyrene	21,000	0.52	26	0.088	22	0.21
		PCBs ((mg/kg)			
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA
	Priority	Pollutant Metals a	and Total Cyanide	(mg/kg)		
Antimony*	20	NA	NA	NA	NA	NA
Arsenic*	120	NA	NA	NA	NA	NA
Barium*	1,800	NA	NA	NA	NA	NA
Beryllium*	130,000	NA	NA	NA	NA	NA
Cadmium*	590	NA	NA	NA	NA	NA
Chromium ***	21	NA	NA	NA	NA	NA
Copper*	330,000	NA	NA	NA	NA	NA
Lead**		NA	NA	NA	NA	NA
Mercury*	32	NA	NA	NA	NA	NA
Nickel*	14,000	NA	NA	NA	NA	NA
Selenium*	1.3	NA	NA	NA	NA	NA
Silver ***	39	NA	NA	NA	NA	NA
Thallium*	34	NA	NA	NA	NA	NA
Zinc*	32,000	NA	NA	NA	NA	NA
Total Cyanide*	120	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3) \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- $\ensuremath{\textbf{(6)}}\ PCBs\ -\ Polychlorinated\ Biphenyls.$
- (7) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used.
- (8) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (9) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- (10) NA Not analyzed.
- (11) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample	Location and Dep	th (feet below grou	ınd surface)/Conce	entration
	Screening	SB49-001	SB49B-001	SB50-002	SB50-003	SB51-001
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	14 - 16	20 - 22	10 -12
		TCL Volat	tiles (mg/kg)			
Acetone	16	0.029 U	0.031 U	1.9 U	0.037 UJ	0.03 U
Benzene	0.17	0.0059 U	0.0063 U	2.9	0.0073 UJ	3.7
Bromodichloromethane	0.6	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Bromoform	0.8	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Bromomethane	1.2	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
2-Butanone		0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Carbon Disulfide	160	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Carbon Tetrachloride **	0.33	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Chlorobenzene	6.5	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Chloroethane +	70	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Chloroform	2.9	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Chloromethane +	0.68	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Dibromochloromethane	0.4	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1-Dichloroethane	110	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,2-Dichloroethane **	0.1	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1-Dichloroethene **	0.3	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
cis-1,2-Dichloroethene	1.1	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
trans-1,2-Dichloroethene	3.4	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,2-Dichloropropane **	0.15	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
cis-1,3-Dichloropropene **	0.02	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
trans-1,3-Dichloropropene **	0.02	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Ethylbenzene	19	0.0059 U	0.0063 U	30	0.56	5.8
2-Hexanone +	1.3	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
4-Methyl-2-Pentanone		0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Methylene Chloride	0.2	0.012 U	0.013 U	0.75 U	0.015 UJ	0.012 U
Methyl tert-butyl ether **	0.32	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Styrene	18	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1,2,2-Tetrachloroethane +	3.3	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Tetrachloroethene **	0.3	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Toluene	29	0.0059 U	0.0063 U	0.38 U	0.018 J	0.0094
1,1,1-Trichloroethane	9.6	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
1,1,2-Trichloroethane **	0.3	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Trichloroethene **	0.3	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
Vinyl Chloride **	0.07	0.0059 U	0.0063 U	0.38 U	0.0073 UJ	0.006 U
m,p-Xylene*	150	NA	NA	NA	NA	NA
o-Xylene*	150	NA	NA	NA	NA	NA
Xylenes, Total	150	0.012 U	0.013 U	21	2.1 Ј	3.9

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- $(3)\ U-Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) Shaded value exceeds Tier 1 screening level.
- (5) J Indicates an estimated value.
- (6) -- Toxicity criteria not available for exposure route.
- (7) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (8) NA Not analyzed.

- (6) NA Not alrayzed.

 (9) *The "total xylenes" screening level was used because it is more conservative.

 (10) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.

 (11) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SB49-001	SB49B-001	SB50-002	SB50-003	SB51-001	
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	14 - 16	20 - 22	10 -12	
		TCL Semivo	latiles (mg/kg)				
Bis(2-chloroethoxy)methane		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
Bis(2-chloroethyl)ether**	0.0004	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
Bis(2-ethylhexyl)phthalate	31,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
4-Bromophenyl phenyl ether		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
Butyl benzyl phthalate	930	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
Carbazole	2.8	0.42 U	0.41 U	0.46 U	0.45 U	4.8	
4-Chloro-3-methylphenol +	120	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
4-Chloroaniline	0.7	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
2-Chloronaphthalene		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
2-Chlorophenol	1.5	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
4-Chlorophenyl phenyl ether		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
Dibenzofuran +	76	0.42 U	0.41 U	1.2	0.45 U	3.4	
1,2-Dichlorobenzene	43	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
1,3-Dichlorobenzene +	1.0	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
1,4-Dichlorobenzene	11	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
3,3'-Dichlorobenzidine**	0.033	0.84 U	0.82 U	0.91 U	0.89 U	0.87 U	
2,4-Dichlorophenol	0.48	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
Diethyl phthalate	470	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
Dimethyl phthalate +	380	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
Di-n-butyl phthalate	2,300	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
2,4-Dimethylphenol	9	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
4,6-Dinitro-2-methylphenol		2 U	2 U	2.2 U	2.2 U	2.1 U	
2,4-Dinitrophenol**	0.2	2 U	2 U	2.2 U	2.2 U	2.1 U	
2,4-Dinitrotoluene**	0.0008	0.22 U	0.21 U	0.23 U	0.23 U	0.22 U	
2,6-Dinitrotoluene**	0.0007	0.22 U	0.21 U	0.23 U	0.23 U	0.22 U	
Di-n-octyl phthalate	10,000	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
Hexachlorobenzene	11	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
Hexachlorobutadiene +	15	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
Hexachlorocyclopentadiene	2,200	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
Hexachloroethane	2.6	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
Isophorone	8	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
2-Methylnaphthalene +	39	0.42 U	0.41 U	7.5	0.45 U	52	
2-Methylphenol	15	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
4-Methylphenol ++	0.66	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
2-Nitroaniline		2 U	2 U	2.2 U	2.2 U	2.1 U	
3-Nitroaniline		2 U	2 U	2.2 U	2.2 U	2.1 U	
4-Nitroaniline		2 U	2 U	2.2 U	2.2 U	2.1 U	
Nitrobenzene**	0.1	0.22 U	0.21 U	0.23 U	0.23 U	0.22 U	
2-Nitrophenol		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
4-Nitrophenol		2 U	2 U	2.2 U	2.2 U	2.1 U	
N-Nitrosodi-n-propylamine**	0.00005	0.22 U	0.21 U	0.23 U	0.23 U	0.22 U	
N-Nitrosodiphenylamine	5.6	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
2, 2'-Oxybis(1-Chloropropane)		0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
Pentachlorophenol**	0.10	2 U	2 U	2.2 U	2.2 U	2.1 U	
Phenol	100	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
1,2,4-Trichlorobenzene	53	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	
2,4,5-Trichlorophenol	26	0.84 U	0.82 U	0.91 U	0.89 U	0.87 U	
2,4,6-Trichlorophenol **	0.07	0.42 U	0.41 U	0.46 U	0.45 U	0.44 U	

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (7) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (8) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration					
	Screening	SB49-001	SB49B-001	SB50-002	SB50-003	SB51-001	
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	14 - 16	20 - 22	10 -12	
		PAHs	(mg/kg)				
Acenaphthene	2,900	0.32	0.031 U	3	0.086	28	
Acenaphthylene +	120	0.19	0.031 U	0.44	0.034 U	4.1	
Anthracene	59,000	0.44	0.031 U	2.6	0.18	20	
Benzo(a)anthracene	8	1	0.035	3.9	0.42	17	
Benzo(b)fluoranthene	25	0.78	0.031 U	2.4	0.27	8.2	
Benzo(k)fluoranthene	250	0.74	0.032	3.8	0.38	7.4	
Benzo(g,h,i)perylene +	160,000	0.68	0.031 U	0.74	0.077	8	
Benzo(a)pyrene	82	1	0.041	4.4	0.46	16	
Chrysene	800	1	0.053	3.1	0.42	17	
Dibenzo(a,h)anthracene	7.6	0.11	0.031 U	0.24	0.037	1.4	
Fluoranthene	21,000	1.9	0.058	7.2	0.66	36	
Fluorene	2,800	0.24	0.031 U	2.2	0.098	21	
Indeno(1,2,3-cd)pyrene	69	0.55	0.031 U	0.89	0.098	6.2	
Naphthalene	18	0.2	0.041	44	0.52	67	
Phenanthrene +	1,100	1.3	0.079	8.7	0.46	78	
Pyrene	21,000	2.1	0.078	6.4	0.55	50	
		PCBs	(mg/kg)				
Aroclor 1016		NA	NA	NA	NA	NA	
Aroclor 1221		NA	NA	NA	NA	NA	
Aroclor 1232		NA	NA	NA	NA	NA	
Aroclor 1242		NA	NA	NA	NA	NA	
Aroclor 1248		NA	NA	NA	NA	NA	
Aroclor 1254		NA	NA	NA	NA	NA	
Aroclor 1260		NA	NA	NA	NA	NA	
Total PCBs		NA	NA	NA	NA	NA	
		Pollutant Metals	and Total Cyanide	(mg/kg)			
Antimony*	20	NA	NA	NA	NA	NA	
Arsenic*	120	NA	NA	NA	NA	NA	
Barium*	1,800	NA	NA	NA	NA	NA	
Beryllium*	130,000	NA	NA	NA	NA	NA	
Cadmium*	590	NA	NA	NA	NA	NA	
Chromium ***	21	NA	NA	NA	NA	NA	
Copper*	330,000	NA	NA	NA	NA	NA	
Lead**		NA	NA	NA	NA	NA	
Mercury*	32	NA	NA	NA	NA	NA	
Nickel*	14,000	NA	NA	NA	NA	NA	
Selenium*	1.3	NA	NA	NA	NA	NA	
Silver ***	39	NA	NA	NA	NA	NA	
Thallium*	34	NA	NA	NA	NA	NA	
Zinc*	32,000	NA	NA	NA	NA	NA	
Total Cyanide*	120	NA	NA	NA	NA	NA	

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3) \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- $\ensuremath{\textbf{(6)}}\ PCBs Polychlorinated\ Biphenyls.$
- (7) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used.
- (8) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (9) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used. (10) NA Not analyzed.
- (11) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- $(12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) \\ identified as source material are not included in the TACO Tier 1 evaluation.$

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1			and Depth (feet be		ce)/Concentration	
	Screening	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	Level (mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
		T	CL Volatiles (mg/l	(g)			
Acetone	16	0.027 U	1.4 U	0.027 UJ	0.036 U	0.1	0.031 UJ
Benzene	0.17	0.0055 U	2.6	0.0089 J	0.0086	0.21	0.0062 UJ
Bromodichloromethane	0.6	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Bromoform	0.8	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Bromomethane	1.2	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
2-Butanone		0.011 U	0.55 U	0.011 UJ	0.015 U	0.023	0.012 UJ
Carbon Disulfide	160	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Carbon Tetrachloride	0.33	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chlorobenzene	6.5	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chloroethane +	70	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
Chloroform	2.9	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Chloromethane +	0.68	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Dibromochloromethane	0.4	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1-Dichloroethane	110	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,2-Dichloroethane **	0.1	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1-Dichloroethene	0.3	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
cis-1,2-Dichloroethene	1.1	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
trans-1,2-Dichloroethene	3.4	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,2-Dichloropropane **	0.15	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
cis-1,3-Dichloropropene **	0.02	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
trans-1,3-Dichloropropene **	0.02	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Ethylbenzene	19	0.0055 U	11	0.043 J	0.0073 U	1.2	0.0062 UJ
2-Hexanone +	1.3	0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
4-Methyl-2-Pentanone		0.011 U	0.55 U	0.011 UJ	0.015 U	0.019 U	0.012 UJ
Methylene Chloride	0.2	0.011 U	0.55 U	0.011 UJ	0.018	0.035	0.026 J
Methyl tert-butyl ether	0.32	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Styrene	18	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1,2,2-Tetrachloroethane +	3.3	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Tetrachloroethene	0.3	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Toluene	29	0.0055 U	0.7	0.0097 J	0.0073 U	0.013	0.0062 UJ
1,1,1-Trichloroethane	9.6	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
1,1,2-Trichloroethane	0.3	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Trichloroethene	0.3	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
Vinyl Chloride **	0.07	0.0055 U	0.28 U	0.0054 UJ	0.0073 U	0.0095 U	0.0062 UJ
m,p-Xylene*	150	NA	NA	NA	NA	NA	NA
o-Xylene*	150	NA	NA	NA	NA	NA	NA
Xylenes, Total	150	0.024	9.8	0.055 J	0.015 U	1.7	0.012 UJ

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) Shaded value exceeds Tier 1 screening level.
- (5) J Indicates an estimated value.
- (6) -- Toxicity criteria not available for exposure route.
- (7) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (8) NA Not analyzed.
- (9) * The "total xylenes" screening level was used because it is more conservative.
- (10) ** Several values exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (11) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SP45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1		Sample Location	and Depth (feet be	elow ground surfa	ce)/Concentration	
	Screening	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	Level (mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
			Semivolatiles (m				20
Bis(2-chloroethoxy)methane		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Bis(2-chloroethyl)ether**	0.0004	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Bis(2-ethylhexyl)phthalate	31,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Bromophenyl phenyl ether		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Butyl benzyl phthalate	930	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Carbazole	2.8	0.41 U	0.4 U	0.39 U	0.41 U	5.1	0.4 U
4-Chloro-3-methylphenol +	120	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Chloroaniline	0.7	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Chloronaphthalene		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Chlorophenol	1.5	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Chlorophenyl phenyl ether		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Dibenzofuran +	76	0.82	0.91	0.39 U	0.41 U	4.9	0.4 U
1,2-Dichlorobenzene	43	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,3-Dichlorobenzene +	1.0	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,4-Dichlorobenzene	11	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
3,3'-Dichlorobenzidine**	0.033	0.82 U	0.8 U	0.77 U	0.82 U	0.85 U	0.8 U
2,4-Dichlorophenol	0.48	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Diethyl phthalate	470	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Dimethyl phthalate +	380	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Di-n-butyl phthalate	2,300	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2,4-Dimethylphenol	9	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
2,4-Dinitrophenol**	0.2	2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
2,4-Dinitrotoluene**	0.0008	0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
2,6-Dinitrotoluene**	0.0007	0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
Di-n-octyl phthalate	10,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorobenzene	11	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorobutadiene +	15	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorocyclopentadiene	2,200	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachloroethane	2.6	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Isophorone	8	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Methylnaphthalene +	39	4.5	19	1.8	0.41 U	37	0.4 U
2-Methylphenol	15	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Methylphenol ++	0.66	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
3-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
4-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
Nitrobenzene**	0.1	0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
2-Nitrophenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Nitrophenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
N-Nitrosodi-n-propylamine**	0.00005	0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
N-Nitrosodiphenylamine	5.6	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2, 2'-Oxybis(1-Chloropropane)		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Pentachlorophenol**	0.10	2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
Phenol	100	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,2,4-Trichlorobenzene	53	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2,4,5-Trichlorophenol	26	0.82 U	0.8 U	0.77 U	0.82 U	0.85 U	0.8 U
2,4,6-Trichlorophenol **	0.07	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (7) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (8) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1 Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	Level (mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
		-	PAHs (mg/kg)	<u>-</u>	·		
Acenaphthene	2,900	2.4	3.7	0.19	2	16	0.11
Acenaphthylene +	120	0.47	1	0.066	1.6	2.4	0.046
Anthracene	59,000	2.2	2.2	0.12	2.6	16	0.12
Benzo(a)anthracene	8	2.3	1.8	0.091	5.2	14	0.12
Benzo(b)fluoranthene	25	1.2	0.71	0.038	1.4	6.4	0.054
Benzo(k)fluoranthene	250	1.1	0.31	0.035	1.8	6.5	0.076
Benzo(g,h,i)perylene +	160,000	0.57	0.18	0.029 U	1	1.6	0.042
Benzo(a)pyrene	82	1.7	1.3	0.07	4.8	11	0.099
Chrysene	800	2	1.7	0.096	6.8	15	0.14
Dibenzo(a,h)anthracene	7.6	0.11	0.1	0.029 U	0.5	1.2	0.03 U
Fluoranthene	21,000	3.7	2.7	0.15	7.8	24	0.22
Fluorene	2,800	2.5	3.6	0.2	4	19	0.13
Indeno(1,2,3-cd)pyrene	69	0.59	0.35	0.029 U	0.92	1.8	0.031
Naphthalene	18	6.1	22	2.3	1.5	41	0.24
Phenanthrene +	1,100	7.6	11	0.65	14	57	0.48
Pyrene	21,000	4.2	4.5	0.22	12	27	0.27
			PCBs (mg/kg)			1	
Aroclor 1016		NA	NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA	NA
Total PCBs		NA	NA	NA	NA	NA	NA
	1 1		t Metals and Total	J (U U)			
Antimony*	20	NA	NA	NA	NA	NA	NA
Arsenic*	120	NA	NA	NA	NA	NA	NA
Barium*	1,800	NA	NA	NA	NA	NA	NA NA
Beryllium*	130,000	NA	NA NA	NA NA	NA NA	NA NA	NA NA
Cadmium*	590	NA					NA
Chromium ***	21	NA	NA	NA	NA	NA	NA
Copper*	330,000	NA	NA	NA	NA	NA	NA
Lead**		NA	NA	NA	NA	NA	NA
Mercury*	32	NA	NA	NA	NA	NA	NA
Nickel*	14,000	NA	NA	NA	NA	NA	NA
Selenium*	1.3	NA	NA	NA	NA	NA	NA
Silver ***	39	NA	NA	NA	NA	NA	NA
Thallium*	34	NA	NA	NA	NA	NA	NA
Zinc*	32,000	NA	NA	NA	NA	NA	NA
Total Cyanide*	120	NA	NA	NA	NA	NA	NA

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- $\ensuremath{\textbf{(6)}}\ PCBs\ -\ Polychlorinated\ Biphenyls.$
- (7) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used.
- (8) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (9) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used.
- (10) NA Not analyzed.
- (11) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration					
	Screening	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001	
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20	
		TCL Volat	iles (mg/kg)				
Acetone	16	3.2 U	0.027 U	0.026	0.032 U	0.028 U	
Benzene	0.17	5.7	0.0054 U	0.064	0.0064 U	0.0056 U	
Bromodichloromethane **	0.6	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
Bromoform	0.8	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
Bromomethane **	1.2	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U	
2-Butanone		1.3 U	0.011 U	0.01 U	0.013 U	0.011 U	
Carbon Disulfide	160	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
Carbon Tetrachloride **	0.33	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
Chlorobenzene	6.5	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
Chloroethane +	70	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U	
Chloroform	2.9	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
Chloromethane +	0.68	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
Dibromochloromethane **	0.4	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
1,1-Dichloroethane	110	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
1,2-Dichloroethane **	0.1	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
1,1-Dichloroethene **	0.3	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
cis-1,2-Dichloroethene	1.1	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
trans-1,2-Dichloroethene	3.4	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
1,2-Dichloropropane **	0.15	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
cis-1,3-Dichloropropene **	0.02	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
trans-1,3-Dichloropropene **	0.02	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
Ethylbenzene	19	25	0.0054 U	0.11	0.0064 U	0.0056 U	
2-Hexanone +	1.3	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U	
4-Methyl-2-Pentanone		1.3 U	0.011 U	0.01 U	0.013 U	0.011 U	
Methylene Chloride	0.2	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U	
Methyl tert-butyl ether **	0.32	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
Styrene	18	0.64 U	0.0054 U	0.016	0.0064 U	0.0056 U	
1,1,2,2-Tetrachloroethane +	3.3	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
Tetrachloroethene **	0.3	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
Toluene	29	0.84	0.0054 U	0.066	0.0064 U	0.0056 U	
1,1,1-Trichloroethane	9.6	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
1,1,2-Trichloroethane **	0.3	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
Trichloroethene **	0.3	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
Vinyl Chloride **	0.07	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	
m,p-Xylene*	150	NA	NA	NA	NA	NA	
o-Xylene*	150	NA	NA	NA	NA	NA	
Xylenes, Total	150	8.7	0.011 U	0.18	0.013 U	0.011 U	

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list. (3) Shaded value exceeds Tier 1 screening level.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
- (6) ** Value exceeded TACO screening levels but were consistently non-detect, so no values were shaded.
 (10) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	er 1 Sample Location and Depth (feet below ground surface)/Concentration						
	Screening	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001		
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20		
		TCL Semivol	latiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
Bis(2-chloroethyl)ether**	0.0004	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
Bis(2-ethylhexyl)phthalate	31,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
4-Bromophenyl phenyl ether		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
Butyl benzyl phthalate	930	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
Carbazole	2.8	0.51	0.4 U	0.39 U	0.4 U	0.4 U		
4-Chloro-3-methylphenol +	120	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
4-Chloroaniline	0.7	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
2-Chloronaphthalene		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
2-Chlorophenol	1.5	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
4-Chlorophenyl phenyl ether		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
Dibenzofuran +	76	1.9	0.4 U	0.39 U	0.4 U	0.4 U		
1,2-Dichlorobenzene	43	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
1,3-Dichlorobenzene +	1.0	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
1,4-Dichlorobenzene	11	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
3,3'-Dichlorobenzidine**	0.033	0.84 U	0.79 U	0.79 U	0.81 U	0.81 U		
2,4-Dichlorophenol	0.48	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
Diethyl phthalate	470	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
Dimethyl phthalate +	380	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
Di-n-butyl phthalate	2,300	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
2,4-Dimethylphenol	9	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.9 U	2 U	2 U		
2,4-Dinitrophenol**	0.2	2 U	1.9 U	1.9 U	2 U	2 U		
2,4-Dinitrotoluene**	0.0008	0.22 U	0.2 U	0.2 U	0.21 U	0.21 U		
2,6-Dinitrotoluene**	0.0007	0.22 U	0.2 U	0.2 U	0.21 U	0.21 U		
Di-n-octyl phthalate	10,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
Hexachlorobenzene	11	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
Hexachlorobutadiene +	15	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
Hexachlorocyclopentadiene	2,200	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
Hexachloroethane	2.6	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
Isophorone	8	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
2-Methylnaphthalene +	39	45	0.4 U	0.8	0.4 U	0.4 U		
2-Methylphenol	15	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
4-Methylphenol ++	0.66	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
2-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2 U		
3-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2 U		
4-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2 U		
Nitrobenzene**	0.1	0.22 U	0.2 U	0.2 U	0.21 U	0.21 U		
2-Nitrophenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
4-Nitrophenol	0.00005	2 U	1.9 U	1.9 U	2 U 0.21 U	0.21 U		
N-Nitrosodi-n-propylamine**	0.00005	0.22 U	0.2 U	0.2 U				
N-Nitrosodiphenylamine	5.6	0.42 U 0.42 U	0.4 U	0.39 U 0.39 U	0.4 U 0.4 U	0.4 U 0.4 U		
2, 2'-Oxybis(1-Chloropropane)			0.4 U					
Pentachlorophenol**	0.10	2 U	1.9 U	1.9 U	2 U	2 U		
Phenol	100	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
1,2,4-Trichlorobenzene	53	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		
2,4,5-Trichlorophenol	26	0.84 U	0.79 U	0.79 U	0.81 U	0.81 U		
2,4,6-Trichlorophenol **	0.07	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U		

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (7) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (8) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration					
	Screening	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001	
Compound/Analyte	Level (mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20	
		PAHs	(mg/kg)				
Acenaphthene	2,900	12	0.046	0.078	0.03 U	0.031 U	
Acenaphthylene +	120	4	0.03 U	0.089	0.03 U	0.031 U	
Anthracene	59,000	7.4	0.046	0.099	0.03 U	0.031 U	
Benzo(a)anthracene	8	5.4	0.037	0.098	0.03 U	0.031 U	
Benzo(b)fluoranthene	25	2.6	0.03 U	0.054	0.03 U	0.031 U	
Benzo(k)fluoranthene	250	2.1	0.03 U	0.05	0.03 U	0.031 U	
Benzo(g,h,i)perylene +	160,000	1.8	0.03 U	0.033	0.03 U	0.031 U	
Benzo(a)pyrene	82	4.8	0.034	0.092	0.03 U	0.031 U	
Chrysene	800	5.3	0.045	0.1	0.03 U	0.031 U	
Dibenzo(a,h)anthracene	7.6	0.6	0.03 U	0.029 U	0.03 U	0.031 U	
Fluoranthene	21,000	9.6	0.062	0.16	0.03 U	0.031 U	
Fluorene	2,800	9.3	0.049	0.15	0.03 U	0.031 U	
Indeno(1,2,3-cd)pyrene	69	1.6	0.03 U	0.029 U	0.03 U	0.031 U	
Naphthalene	18	110	0.26	0.95	0.03 U	0.031 U	
Phenanthrene +	1,100	27	0.15	0.58	0.067	0.037	
Pyrene	21,000	14	0.095	0.31	0.03 U	0.031 U	
		PCBs ((mg/kg)				
Aroclor 1016		NA	NA	NA	NA	NA	
Aroclor 1221		NA	NA	NA	NA	NA	
Aroclor 1232		NA	NA	NA	NA	NA	
Aroclor 1242		NA	NA	NA	NA	NA	
Aroclor 1248		NA	NA	NA	NA	NA	
Aroclor 1254		NA	NA	NA	NA	NA	
Aroclor 1260		NA	NA	NA	NA	NA	
Total PCBs		NA	NA	NA	NA	NA	
	Priority	Pollutant Metals	and Total Cyanide	e (mg/kg)			
Antimony*	20	NA	NA	NA	NA	NA	
Arsenic*	120	NA	NA	NA	NA	NA	
Barium*	1,800	NA	NA	NA	NA	NA	
Beryllium*	130,000	NA	NA	NA	NA	NA	
Cadmium*	590	NA	NA	NA	NA	NA	
Chromium ***	21	NA	NA	NA	NA	NA	
Copper*	330,000	NA	NA	NA	NA	NA	
Lead**		NA	NA	NA	NA	NA	
Mercury*	32	NA	NA	NA	NA	NA	
Nickel*	14,000	NA	NA	NA	NA	NA	
Selenium*	1.3	NA	NA	NA	NA	NA	
Silver ***	39	NA	NA	NA	NA	NA	
Thallium*	34	NA	NA	NA	NA	NA	
Zinc*	32,000	NA	NA	NA	NA	NA	
Total Cyanide*	120	NA	NA	NA	NA	NA	

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3)\ U-Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- $\ensuremath{\textbf{(6)}}\ PCBs\ -\ Polychlorinated\ Biphenyls.$
- (7) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used.
- (8) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (9) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used. (10) NA Not analyzed.
- (11) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration					
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002	
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18	
		TCL Volat	tiles (mg/kg)				
Acetone	16	0.028 U	0.047 U	0.031 UJ	0.028 U	0.033 U	
Benzene	0.17	0.0057 U	0.0094 U	0.0061 UJ	0.031	0.0067 U	
Bromodichloromethane	0.6	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Bromoform	0.8	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Bromomethane	1.2	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U	
2-Butanone		0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U	
Carbon Disulfide	160	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Carbon Tetrachloride	0.33	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Chlorobenzene	6.5	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Chloroethane +	70	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U	
Chloroform	2.9	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Chloromethane +	0.68	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Dibromochloromethane	0.4	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
1,1-Dichloroethane	110	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
1,2-Dichloroethane	0.1	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
1,1-Dichloroethene	0.3	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
cis-1,2-Dichloroethene	1.1	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
trans-1,2-Dichloroethene	3.4	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
1,2-Dichloropropane	0.15	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
cis-1,3-Dichloropropene	0.02	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
trans-1,3-Dichloropropene	0.02	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Ethylbenzene	19	0.0057 U	0.0094 U	0.0061 UJ	0.071	0.0067 U	
2-Hexanone +	1.3	0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U	
4-Methyl-2-Pentanone		0.011 U	0.019 U	0.012 UJ	0.011 U	0.013 U	
Methylene Chloride	0.2	0.011 U	0.019 U	0.012 UJ	0.017	0.016	
Methyl tert-butyl ether	0.32	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Styrene	18	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
1,1,2,2-Tetrachloroethane +	3.3	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Tetrachloroethene	0.3	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Toluene	29	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
1,1,1-Trichloroethane	9.6	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
1,1,2-Trichloroethane	0.3	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Trichloroethene	0.3	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
Vinyl Chloride	0.07	0.0057 U	0.0094 U	0.0061 UJ	0.0055 U	0.0067 U	
m,p-Xylene*	150	NA	NA	NA	NA	NA	
o-Xylene*	150	NA	NA	NA	NA	NA	
Xylenes, Total	150	0.011 U	0.019 U	0.012 UJ	0.044	0.013 U	

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) J Indicates an estimated value.
- (5) -- Toxicity criteria not available for exposure route.
- (6) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (7) NA Not analyzed.
- (8) * The "total xylenes" screening level was used because it is more conservative.
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	Sample Location and Depth (feet below ground surface)/Concentration					
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002	
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18	
, and an	(8 87	TCL Semivo	latiles (mg/kg)				
Bis(2-chloroethoxy)methane		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
Bis(2-chloroethyl)ether**	0.0004	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
4-Bromophenyl phenyl ether		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
Butyl benzyl phthalate	930	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
Carbazole	2.8	0.39 U	6.8	0.41 U	0.39 U	0.38 U	
4-Chloro-3-methylphenol +	120	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
4-Chloroaniline	0.7	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
2-Chloronaphthalene		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
2-Chlorophenol	1.5	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
4-Chlorophenyl phenyl ether		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
Dibenzofuran +	76	0.39 U	4.6	0.41 U	0.39 U	0.38 U	
1,2-Dichlorobenzene	43	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
1,3-Dichlorobenzene +	1.0	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
1,4-Dichlorobenzene	11	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
3,3'-Dichlorobenzidine**	0.033	0.79 U	1.1 U	0.82 U	0.78 U	0.75 U	
2,4-Dichlorophenol	0.48	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
Diethyl phthalate	470	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
Dimethyl phthalate +	380	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
Di-n-butyl phthalate	2,300	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
2,4-Dimethylphenol	9	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
4,6-Dinitro-2-methylphenol		1.9 U	2.6 U	2 U	1.9 U	1.8 U	
2,4-Dinitrophenol**	0.2	1.9 U	2.6 U	2 U	1.9 U	1.8 U	
2,4-Dinitrotoluene**	0.0008	0.2 U	0.28 U	0.21 U	0.2 U	0.19 U	
2,6-Dinitrotoluene**	0.0007	0.2 U	0.28 U	0.21 U	0.2 U	0.19 U	
Di-n-octyl phthalate	10,000	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
Hexachlorobenzene	11	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
Hexachlorobutadiene +	15	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
Hexachlorocyclopentadiene	2,200	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
Hexachloroethane	2.6	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
Isophorone	8	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
2-Methylnaphthalene +	39 15	0.39 U	3.8	0.41 U 0.41 U	0.39 U	0.38 U	
2-Methylphenol		0.39 U 0.39 U	0.54 U 2.2	0.41 U	0.39 U 0.39 U	0.38 U 0.38 U	
4-Methylphenol ++ 2-Nitroaniline	0.66	0.39 U 1.9 U	2.2 2.6 U	0.41 U 2 U	0.39 U 1.9 U	1.8 U	
3-Nitroaniline		1.9 U	2.6 U	2 U	1.9 U	1.8 U	
4-Nitroaniline		1.9 U	2.6 U	2 U	1.9 U	1.8 U	
Nitrobenzene**	0.1	0.2 U	0.28 U	0.21 U	0.2 U	0.19 U	
2-Nitrophenol		0.2 U	0.28 U	0.21 U	0.2 U	0.19 U	
4-Nitrophenol		1.9 U	2.6 U	2 U	1.9 U	1.8 U	
N-Nitrosodi-n-propylamine**	0.00005	0.2 U	0.28 U	0.21 U	0.2 U	0.19 U	
N-Nitrosodi-h-propytamine	5.6	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
2, 2'-Oxybis(1-Chloropropane)		0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
Pentachlorophenol**	0.10	1.9 U	2.6 U	2 U	1.9 U	1.8 U	
Phenol	100	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
1,2,4-Trichlorobenzene	53	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	
2,4,5-Trichlorophenol	26	0.79 U	1.1 U	0.82 U	0.78 U	0.75 U	
2,4,6-Trichlorophenol **	0.07	0.39 U	0.54 U	0.41 U	0.39 U	0.38 U	

- (1) mg/kg milligrams per kilogram.
- (2) TCL Target compound list.
- (3) -- Toxicity criteria not available for exposure route.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) Shaded value exceeds Tier 1 screening level.
- (6) **Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (7) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- (8) ++ Acceptable detection limit used as screening level for non-TACO compound (Illinois EPA 2004).
- (9) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) identified as source material are not included in the TACO Tier 1 evaluation.

Tier 1 Screening: Soil Migration to Groundwater Route (Class II) The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Depth (feet below ground surface)/Concentration							
	Screening	SB57-002	SB58-001	SB58-002	SB59-001	SB59-002	
Compound/Analyte	Level (mg/kg)	16 - 18	12 - 14	16 - 18	6 - 8	16 - 18	
Compound/Analyte	LCVCI (HIg/Kg)		(mg/kg)	10 - 10	0 - 0	10 - 10	
Acenaphthene	2,900	0.03 U	4.3	0.072	0.029 U	0.028 U	
Acenaphthylene +	120	0.03 U	0.45	0.072 0.031 U	0.029 U	0.028 U	
Anthracene	59,000	0.03 U	11	0.079	0.029 U	0.028 U	
Benzo(a)anthracene	8	0.03 U	14	0.065	0.029 U	0.028 U	
Benzo(b)fluoranthene	25	0.03 U	8.5	0.038	0.029 U	0.028 U	
Benzo(k)fluoranthene	250	0.03 U	9.8	0.038	0.029 U	0.028 U	
Benzo(g,h,i)perylene +	160,000	0.03 U	3.2	0.031 U	0.029 U	0.028 U	
Benzo(a)pyrene	82	0.03 U	12	0.059	0.029 U	0.028 U	
Chrysene	800	0.037	12	0.061	0.029	0.028 U	
Dibenzo(a,h)anthracene	7.6	0.03 U	1.6	0.031 U	0.029 U	0.028 U	
Fluoranthene	21,000	0.056	27	0.14	0.029	0.028 U	
Fluorene	2,800	0.03 U	6.2	0.088	0.029 U	0.028 U	
Indeno(1,2,3-cd)pyrene	69	0.03 U	3.8	0.031 U	0.029 U	0.028 U	
Naphthalene	18	0.054	4	0.39	0.087	0.028 U	
Phenanthrene +	1,100	0.11	27	0.24	0.089	0.075	
Pyrene	21,000	0.057	23	0.11	0.05	0.028 U	
		PCBs	(mg/kg)				
Aroclor 1016		NA	NA	NA	NA	NA	
Aroclor 1221		NA	NA	NA	NA	NA	
Aroclor 1232		NA	NA	NA	NA	NA	
Aroclor 1242		NA	NA	NA	NA	NA	
Aroclor 1248		NA	NA	NA	NA	NA	
Aroclor 1254		NA	NA	NA	NA	NA	
Aroclor 1260		NA	NA	NA	NA	NA	
Total PCBs		NA	NA	NA	NA	NA	
	n - ń	Pollutant Metals		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	,		
Antimony*	20	NA	NA	NA	NA	NA	
Arsenic*	120	NA	NA	NA	NA	NA	
Barium*	1,800	NA	NA	NA	NA	NA	
Beryllium*	130,000	NA	NA	NA	NA	NA	
Cadmium*	590	NA	NA	NA	NA	NA	
Chromium ***	21	NA	NA	NA	NA	NA	
Copper*	330,000	NA	NA	NA	NA	NA	
Lead**		NA	NA	NA	NA	NA	
Mercury*	32	NA	NA	NA	NA	NA	
Nickel*	14,000	NA	NA	NA	NA	NA	
Selenium*	1.3	NA	NA	NA	NA	NA	
Silver ***	39	NA	NA	NA	NA	NA	
Thallium*	34	NA	NA	NA	NA	NA	
Zinc*	32,000	NA	NA	NA	NA	NA	
Total Cyanide*	120	NA	NA	NA	NA	NA	

- (1) mg/kg milligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- $(3) \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (4) -- Toxicity criteria not available for exposure route.
- (5) Shaded value exceeds Tier 1 screening level.
- $\ensuremath{\textbf{(6)}}\ PCBs Polychlorinated\ Biphenyls.$
- (7) * Toxicity criteria for metals and cyanide are only applicable to TCLP data; therefore, pH-dependent screening levels for Class II groundwater were used.
- (8) ** A pH-dependent screening level was not available for lead; however, SPLP analysis was conducted on sample SP35-001 with a total lead concentration of 1,400 mg/kg. The SPLP lead result for SP35-001 is 0.02 mg/l and is below the Tier 1 Class II screening level of 0.1 mg/l.
- (9) *** A pH-dependent screening level was not available for Class II groundwater; therefore, the pH-dependent screening level for Class I groundwater was used. (10) NA Not analyzed.
- (11) + Screening level obtained from Table A: Soil Remediation Objectives for Residential Properties, Non-TACO Chemicals (Illinois EPA 2004).
- $(12) Soil samples (SP10-001, SP18B-002, SB21-002, SB22-001, SB23-003, SB24-002, SB26-001, SP40-001, SB45-002, SB50-001, SB57-001, and SB58-003) \\ identified as source material are not included in the TACO Tier 1 evaluation.$

Table 7 Tier 1 Screening: Class II Groundwater Ingestion Exposure Route The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Tier 1	1				
	Screening	MW01-001	MW02-001	MW05-001		
Compound/Analyte	Level (mg/l)	2/21/2002	2/21/2002	2/21/2002		
		TCL Volatiles (mg/l)				
Acetone	0.7	0.01 U	0.01 U	0.027		
Benzene	0.025	0.21	0.005 U	0.005 U		
Bromodichloromethane*	0.0002	0.005 U	0.005 U	0.005 U		
Bromoform*	0.001	0.005 U	0.005 U	0.005 U		
Bromomethane		0.01 U	0.01 U	0.01 U		
2-Butanone		0.01 U	0.01 U	0.01 U		
Carbon Disulfide	3.5	0.005 U	0.005 U	0.005 U		
Carbon Tetrachloride	0.025	0.005 U	0.005 U	0.005 U		
Chlorobenzene	0.5	0.005 U	0.005 U	0.005 U		
Chloroethane +	14	0.01 U	0.01 U	0.01 U		
Chloroform	0.001	0.005 U	0.005 U	0.005 U		
Chloromethane +	0.14	0.005 U	0.005 U	0.005 U		
Dibromochloromethane	0.14	0.005 U	0.005 U	0.005 U		
1,1-Dichloroethane	3.5	0.005 U	0.005 U	0.005 U		
1,2-Dichloroethane	0.025	0.005 U	0.005 U	0.005 U		
1,1-Dichloroethene	0.035	0.005 U	0.005 U	0.005 U		
cis-1,2-Dichloroethene	0.2	0.005 U	0.005 U	0.005 U		
trans-1,2-Dichloroethene	0.5	0.005 U	0.005 U	0.005 U		
1,2-Dichloropropane	0.025	0.005 U	0.005 U	0.005 U		
cis-1,3-Dichloropropene	0.005	0.005 U	0.005 U	0.005 U		
trans-1,3-Dichloropropene	0.005	0.005 U	0.005 U	0.005 U		
Ethylbenzene	1.0	0.005 U	0.005 U	0.005 U		
2-Hexanone +	0.28	0.01 U	0.01 U	0.01 U		
4-Methyl-2-Pentanone		0.01 U	0.01 U	0.01 U		
Methylene Chloride	0.05	0.01 U	0.01 U	0.01 U		
Styrene	0.5	0.005 U	0.005 U	0.005 U		
1,1,2,2-Tetrachloroethane +	0.42	0.005 U	0.005 U	0.005 U		
Tetrachloroethene	0.025	0.005 U	0.005 U	0.005 U		
Toluene	2.5	0.005 U	0.005 U	0.005 U		
1,1,1-Trichloroethane	1.0	0.005 U	0.005 U	0.005 U		
1,1,2-Trichloroethane	0.05	0.005 U	0.005 U	0.005 U		
Trichloroethene	0.025	0.005 U	0.005 U	0.005 U		
Vinyl Chloride	0.01	0.01 U	0.01 U	0.01 U		
m,p-Xylene		0.005 U	0.005 U	0.0068		
o-Xylene		0.005 U	0.005 U	0.009		
NOTES:						

- (1) mg/l milligrams per liter.
- (2) TCL Target compound list.
- (3) U Indicates compound/analyte was analyzed for but not detected, the associated value is the sample reporting limit.
 (4) Shaded value exceeds Tier 1 screening level.
- (5) *Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (6) --- Toxicity criteria not available for groundwater ingestion exposure route (Illlinois EPA 2001).
- (7) + Sceening level obtained from Groundwater Remediation Objectives for Chemicals Not Listed in TACO (Illlinois EPA 2004).

Tier 1 Screening: Class II Groundwater Ingestion Exposure Route
The Former Willow Street Station Manufactured Gas Plant Site,
1640 North Kingsbury Portion

	T; 1	C1- T	tion and Data Garant 1/	Componentic
	Tier 1		tion and Date Sampled/	
	Screening	MW01-001	MW02-001	MW05-001
Compound/Analyte	Level (mg/l)		2/21/2002	2/21/2002
D: (2.11) 1	1	TCL Semivolatiles (mg/l		0.01.77
Bis(2-chloroethoxy)methane		0.01 U	0.01 U	0.01 U
Bis(2-chloroethyl)ether	0.01	0.01 U	0.01 U	0.01 U
Bis(2-ethylhexyl)phthalate	0.06	0.01 U	0.01 U	0.01 U
4-Bromophenyl phenyl ether		0.01 U	0.01 U	0.01 U
Butyl benzyl phthalate	7.0	0.01 U	0.01 U	0.01 U
Carbazole		0.01 U	0.01 U	0.01 U
4-Chloro-3-methylphenol +	2.45	0.02 U	0.02 U	0.02 U
4-Chloroaniline	0.028	0.01 U	0.01 U	0.01 U
2-Chloronaphthalene		0.01 U	0.01 U	0.01 U
2-Chlorophenol	0.175	0.01 U	0.01 U	0.01 U
4-Chlorophenyl phenyl ether		0.01 U	0.01 U	0.01 U
Dibenzofuran +	0.14	0.01 U	0.01 U	0.01 U
1,2-Dichlorobenzene	1.5	0.01 U	0.01 U	0.01 U
1,3-Dichlorobenzene +	0.0315	0.01 U	0.01 U	0.01 U
1,4-Dichlorobenzene	0.375	0.01 U	0.01 U	0.01 U
3,3-Dichlorobenzidine	0.1	0.02 U	0.02 U	0.02 U
2,4-Dichlorophenol	0.021	0.01 U	0.01 U	0.01 U
Diethyl phthalate	5.6	0.01 U	0.01 U	0.01 U
Dimethyl phthalate +	70	0.01 U	0.01 U	0.01 U
Di-n-butyl phthalate	3.5	0.01 U	0.01 U	0.01 U
2,4-Dimethylphenol	0.014	0.01 U	0.01 U	0.01 U
4,6-Dinitro-2-methylphenol		0.025 U	0.025 U	0.025 U
2,4-Dinitrophenol	0.14	0.025 U	0.025 U	0.025 U
2,4-Dinitrotoluene*	0.00002	0.01 U	0.01 U	0.01 U
2,6-Dinitrotoluene*	0.00031	0.01 U	0.01 U	0.01 U
Di-n-octyl phthalate	0.7	0.01 U	0.01 U	0.01 U
Hexachlorobenzene*	0.0003	0.01 U	0.01 U	0.01 U
Hexachlorobutadiene + **	0.007	0.01 U	0.01 U	0.01 U
Hexachlorocyclopentadiene	0.5	0.01 U	0.01 U	0.01 U
Hexachloroethane	0.035	0.01 U	0.01 U	0.01 U
Isophorone	1.4	0.01 U	0.01 U	0.01 U
2-Methylnaphthalene +	0.14	0.01 U	0.01 U	0.01 U
2-Methylphenol	0.35	0.01 U	0.01 U	0.01 U
4-Methylphenol +	0.035	0.01 U	0.01 U	0.01 U
2-Nitroaniline		0.025 U	0.025 U	0.025 U
3-Nitroaniline		0.025 U	0.025 U	0.025 U
4-Nitroaniline		0.02 U	0.02 U	0.02 U
Nitrobenzene*	0.0035	0.01 U	0.01 U	0.01 U
2-Nitrophenol		0.01 U	0.01 U	0.01 U
4-Nitrophenol		0.025 U	0.025 U	0.025 U
N-Nitrosodi-n-propylamine*	0.0018	0.01 U	0.01 U	0.01 U
2, 2'-oxybis(1-Chloropropane)		0.01 U	0.01 U	0.01 U
N-Nitrosodiphenylamine	0.016	0.01 U	0.01 U	0.01 U
Pentachlorophenol*	0.005	0.025 U	0.025 U	0.025 U
Phenol	0.1	0.01 U	0.01 U	0.01 U
1,2,4-Trichlorobenzene	0.7	0.01 U	0.01 U	0.01 U
2,4,5-Trichlorophenol	3.5	0.01 U	0.01 U	0.01 U
2,4,6-Trichlorophenol	0.05	0.01 U	0.01 U	0.01 U

- (1) mg/l milligrams per liter.
- (2) TCL Target compound list.
- (3) --- Toxicity criteria not available for groundwater ingestion exposure route (Illlinois EPA 2001).
- (4) U Indicates compound/analyte was analyzed for but not detected, the associated value is the sample reporting limit.
- (5) *Values exceeded TACO screening level but were consistently non-detect so no values were shaded.
- (6) + Sceening level obtained from Groundwater Remediation Objectives for Chemicals Not Listed in TACO (Illlinois EPA 2004).
- (7) **Values exceeded non-TACO screening level but were consistently non-detect so no values were shaded.

Tier 1 Screening: Class II Groundwater Ingestion Exposure Route The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Tier 1 Sample Location and Date Sampled/Concentration							
	Screening	MW01-001	MW02-001	MW05-001			
Compound/Analyte	Level (mg/l)	2/21/2002	2/21/2002	2/21/2002			
Compound/Analyte	Level (IIIg/1)	PAHs (mg/l)					
Acenaphthene	2.1	0.04	0.002 U	0.002 U			
Acenaphthylene +	1.05	0.002 U	0.002 U	0.002 U			
Anthracene	10.5	0.002 U	0.002 U	0.002 U			
Benzo(a)anthracene	0.00065	0.00024	0.0022	0.002 0			
Benzo(a)pyrene	0.0003	0.00024	0.00022	0.00076			
Benzo(b)fluoranthene	0.002	0.00028 0.00018 U	0.00024 0.00018 U	0.00022			
Benzo(g,h,i)perylene +	1.05	0.00018 U	0.00018 U	0.0003			
Benzo(k)fluoranthene	0.00085	0.0001 U	0.0001 U	0.00012			
Chrysene	0.0075	0.001 U	0.0017 U	0.00022 0.001 U			
Dibenz(a,h)anthracene	0.0075	0.0001 U	0.0001 U	0.0001 U			
Fluoranthene	1.4	0.002 U	0.000 U	0.0001 U			
Fluorene	1.4	0.0059	0.002 U	0.002 U			
Indeno(1,2,3-cd)pyrene	0.00215	0.0001 U	0.0001 U	0.0001 U			
Naphthalene	0.22	0.015	0.002	0.01			
Phenanthrene +	1.05	0.002 U	0.002 U	0.0032			
Pyrene	1.05	0.002 U	0.002 U	0.0024			
ryrene	1.00	PCBs (mg/l)	0.002 0	0.002			
Aroclor 1016	0.0025	0.0005 U	0.0005 U	0.0005 U			
Aroclor 1221	0.0025	0.001 U	0.001 U	0.001 U			
Aroclor 1232	0.0025	0.0005 U	0.0005 U	0.0005 U			
Aroclor 1242	0.0025	0.0005 U	0.0005 U	0.0005 U			
Aroclor 1248	0.0025	0.0005 U	0.0005 U	0.0005 U			
Aroclor 1254	0.0025	0.0005 U	0.0005 U	0.0005 U			
Aroclor 1260	0.0025	0.0005 U	0.0005 U	0.0005 U			
	Prio	ority Pollutant Metals (m	g/l)	U.			
Antimony	0.024	0.01 U	0.01 U	0.01 U			
Arsenic	0.2	0.01 U	0.01 U	0.14			
Barium	2.0	0.099	0.05	1.9			
Beryllium	0.5	0.005 U	0.005 U	0.018			
Cadmium	0.05	0.005 U	0.005 U	0.005 U			
Chromium	1.0	0.01 U	0.01 U	0.63			
Copper	0.65	0.01 U	0.01 U	1.2			
Lead	0.1	0.005 U	0.005 U	0.96			
Mercury	0.01	0.00025 U	0.00025 U	0.0026			
Nickel	2.0	0.01 U	0.026	1.1			
Selenium	0.05	0.01 U	0.01 U	0.01 U			
Silver		0.01 U	0.01 U	0.01 U			
Thallium	0.02	0.01 U	0.01 U	0.024			
Zinc	10	0.01 U	0.01 U	2.2			
Total Cyanide	0.6	0.005 U	0.005 U	0.12			

- (1) mg/l milligrams per liter.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) --- Toxicity criteria not available for groundwater ingestion exposure route (Illlinois EPA 2001).
- (4) U Indicates compound/analyte was analyzed for but not detected, the associated value is the sample reporting limit.
- (5) Shaded values exceed Tier 1 screening level.
- (6) PCBs Polychlorinated Biphenyls.
- $(7) + Sceening \ level \ obtained \ from \ Groundwater \ Remediation \ Objectives \ for \ Chemicals \ Not \ Listed \ in \ TACO \ (Illlinois \ EPA \ 2004).$

Table 8 Potential Source Material Calculations for Soil Attenuation Capacity - Total Petroleum Hydrocarbon Results The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Surface Soils	Subsurface		Sample Location and Depth (feet below ground surface)/Concentration								
			SP10-001	SB18B-002	SB21-002	SB22-001	SB23-003	SB24-002	SB26-001	SB45-002	SB46-001	SB46-002
Parameter	(mg/kg)	Soils (mg/kg)	0-2	5-7	5-7	2-3	14-16	5-7	3-5	3-5	10 - 12	16 -18
	TPH (mg/kg)											
TPH-Gasoline			1,700	5,800	340	920	9,100	300	1,300	510	26 U	24 U
TPH-Diesel			11,000	42,000	2,200	8,600	72,000	3,300	5,100	3,700	140	24 U
TPH-Oil			5,200	13,000	1,300	4,600	23,000	1,100	2,100	1,600	410	24 U
TOTAL TPH	6,000*	2,000*	17,900	60,800	3,840	14,120	104,100	4,700	8,500	5,810	576	72 U

- (1) mg/kg milligrams per kilogram.
- (2) TPH Total Petroleum Hydrocarbons.
- (3) * Default natural organic carbon fraction presented in TACO, Section 742.215.
- (4) Total TPH Sum of TPH-Gasoline, TPH-Diesel and TPH-Oil.
- (5) Shaded value exceeds default values.
- (6) U Indicates compound/analyte was analyzed for but not detected, the associated value is the sample reporting limit.

Potential Source Material Calculations for Soil Attenuation Capacity - Total Petroleum Hydrocarbon Results The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Surface Soils	Subsurface		Sample Location and Depth (feet below ground surface)/Concentration								
			SB47-001	SB47-002	SB48-001	SB48-002	SB49-001	SB49B-001	SB50-001	SB50-002	SB50-003	SB51-001
Parameter	(mg/kg)	Soils (mg/kg)	12 - 14	16 -18	8 -10	18 - 20	8 - 10	14 - 16	10 - 12	14 - 16	20 - 22	10 -12
	TPH (mg/kg)											
TPH-Gasoline			27 U	25 U	25 U	24 U	25 U	22 U	140	110	26 U	26
TPH-Diesel			100	25 U	83	24 U	25 U	22 U	1,200	150	31	290
TPH-Oil			97	25 U	270	24 U	25 U	22 U	1,500	33	26 U	290
TOTAL TPH	6,000*	2,000*	224	75 U	378	72 U	75 U	66 U	2,840	293	83	606

- (1) mg/kg milligrams per kilogram.
- (2) TPH Total Petroleum Hydrocarbons.
- (3) * Default natural organic carbon fraction presented in TACO, Section 742.215.
- (4) Total TPH Sum of TPH-Gasoline, TPH-Diesel and TPH-Oil.
- (5) Shaded value exceeds default values.
- (6) U Indicates compound/analyte was analyzed for but not detected, the associated value is the sample reporting limit.

Potential Source Material Calculations for Soil Attenuation Capacity - Total Petroleum Hydrocarbon Results The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Surface Soils	Subsurface		Sample Location and Depth (feet below ground surface)/Concentration								
		Soils (mg/kg)	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003	SB54-001	SB54-002	SB55-001	SB55-002
Parameter	(mg/kg)	Sons (mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20	8 - 10	14 - 16	6 - 8	12 - 14
	TPH (mg/kg)											
TPH-Gasoline			25 U	24	23 U	23 U	25 U	22 U	37	22 U	23 U	22 U
TPH-Diesel			25 U	420	23 U	400	1,000	22 U	250	22 U	23 U	22 U
TPH-Oil			30	330	23 U	670	890	22 U	140	22 U	27	22 U
TOTAL TPH	6,000*	2,000*	80	774	69 U	1,093	1,915	66 U	427	66 U	73	66 U

- (1) mg/kg milligrams per kilogram.
- (2) TPH Total Petroleum Hydrocarbons.
- (3) * Default natural organic carbon fraction presented in TACO, Section 742.215.
- (4) Total TPH Sum of TPH-Gasoline, TPH-Diesel and TPH-Oil.
- (5) U Indicates compound/analyte was analyzed for but not detected, the associated value is the sample reporting limit.

Potential Source Material Calculations for Soil Attenuation Capacity - Total Petroleum Hydrocarbon Results The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Surface Soils	Subsurface	Sample Loc	Sample Location and Depth (feet below ground surface)/Concentration								
		Soils (mg/kg)	SB56-001	SB57-001	SB57-002	SB58-001	SB58-002	SB58-003	SB59-001	SB59-002		
Parameter	(IIIg/Kg)	Sons (mg/kg)	18 - 20	10 - 12	16 - 18	12 - 14	16 - 18	8 - 10	6 - 8	16 - 18		
	TPH (mg/kg)											
TPH-Gasoline			23 U	29 U	24 U	31 U	23 U	43	23 U	22 U		
TPH-Diesel			23 U	660	24 U	300	23 U	5,100	23 U	22 U		
TPH-Oil			23 U	1,900	24 U	1,100	25	500	25	22 U		
TOTAL TPH	6.000*	2.000*	69 U	2,589	72 U	1,431	71	5,643	71	66 U		

- (1) mg/kg milligrams per kilogram.
- (2) TPH Total Petroleum Hydrocarbons.
- (3) * Default natural organic carbon fraction presented in TACO, Section 742.215.
- (4) Total TPH Sum of TPH-Gasoline, TPH-Diesel and TPH-Oil.
- (5) Shaded value exceeds default values.
- (6) U Indicates compound/analyte was analyzed for but not detected, the associated value is the sample reporting limit.

Table 9 Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration						
	C_{sat}	SB01-001	SP02-001	SP03-001	SP05-001	SP06-001		
Compound/Analyte	(mg/kg)	1-2	2-3	2-3	2-3	2-3		
		TCL Vola	tiles (mg/kg)					
Acetone	100,000	0.099	0.17	0.051	0.067	0.073		
Benzene	870	0.0097 U	0.055	0.0072 U	0.015	0.079		
Bromodichloromethane	3,000	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
Bromoform	1,900	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
Bromomethane	3,200	0.019 U	0.024 U	0.014 U	0.024 U	0.025 U		
2-Butanone		0.019 U	0.024 U	0.014 U	0.024 U	0.025 U		
Carbon Disulfide	720	0.0097 U	0.023	0.0072 U	0.012 U	0.013 U		
Carbon Tetrachloride	1,100	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
Chlorobenzene	680	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
Chloroethane		0.019 U	0.024 U	0.014 U	0.024 U	0.025 U		
Chloroform	2,900	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
Chloromethane		0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
Dibromochloromethane	1,300	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
1,1-Dichloroethane	1,700	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
1,2-Dichloroethane	1,800	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
1,1-Dichloroethene	1,500	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
cis-1,2-Dichloroethene		0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
trans-1,2-Dichloroethene		0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
1,2-Dichloropropane	1,100	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
cis-1,3-Dichloropropene	1,400	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
trans-1,3-Dichloropropene	1,400	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
Ethylbenzene	400	0.0097 U	0.044	0.0072 U	0.012 U	0.15		
2-Hexanone		0.019 U	0.024 U	0.014 U	0.024 U	0.025 U		
4-Methyl-2-Pentanone		0.019 U	0.024 U	0.014 U	0.024 U	0.025 U		
Methylene	2,400	0.019 U	0.024 U	0.014 U	0.024 U	0.025 U		
Styrene	1,500	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
1,1,2,2-Tetrachloroethane		0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
Tetrachloroethene	240	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
Toluene	650	0.0097 U	0.036	0.0072 U	0.012 U	0.041		
1,1,1-Trichloroethane	1,200	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
1,1,2-Trichloroethane	1,800	0.0097 U	0.012 U	0.0072 U	0.012 U	0.013 U		
Trichloroethene	1,300	0.0097 U	0.021	0.0072 U	0.012 U	0.013 U		
Vinyl Chloride	1,200	0.019 U	0.024 U	0.014 U	0.024 U	0.025 U		
m,p-Xylene	420	0.0097 U	0.028	0.0072 U	0.012 U	0.11		
o-Xylene	410	0.0097 U	0.025	0.0096	0.012 U	0.12		
Subtotal NOTES:	:	0.5	0.8	0.3	0.6	1.0		

NOTES:

(1) mg/kg - miligrams per kilogram.

(2) TCL - Target compound list.

(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

(4) — Soil saturation limits not available.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Sample l	Location and Dept	th (feet below grou	ind surface)/Conce	ntration
C_{sat}	SB01-001	SP02-001	SP03-001	SP05-001	SP06-001
(mg/kg)	1-2	2-3	2-3	2-3	2-3
	TCL Semivo	latiles (mg/kg)			
	0.37 U	0.37 U	0.36 U	0.38 U	0.38 U
3,300	0.37 U	0.37 U	0.36 U	0.38 U	0.38 U
31,000	0.37 U	0.37 U	0.49	0.38 U	0.38 U
	0.37 U	0.37 U	0.36 U	0.38 U	0.38 U
930	0.37 U	0.37 U	0.36 U	0.38 U	0.38 U
	0.37 U	0.52	2.9	0.67	2.2
	0.37 U	0.37 U	0.36 U	0.38 U	0.38 U
	0.37 U	0.37 U	0.36 U	0.38 U	0.38 U
	0.37 U	0.37 U	0.36 U	0.38 U	0.38 U
53,000	0.37 U	0.37 U	0.36 U	0.38 U	0.38 U
	0.37 U	0.37 U	0.36 U	0.38 U	0.38 U
	0.37 U	0.37 U	0.36 U	0.38 U	0.4
560	0.37 U	0.37 U	0.36 U	0.38 U	0.38 U
	0.37 U	0.37 U	0.36 U	0.38 U	0.38 U
	0.37 U	0.37 U	0.36 U	0.38 U	0.38 U
	0.74 U	0.75 U	0.71 U	0.76 U	0.76 U
	0.37 U			0.38 U	0.38 U
2,000					0.38 U
					0.38 U
2.300					0.38 U
					0.38 U
<u> </u>					1.8 U
1					1.8 U
1					0.38 U
					0.38 U
10,000					0.38 U
11					0.38 U
					0.38 U
2 200					0.38 U
- i					0.38 U
					0.38 U
					2.7
					0.38 U
-11					0.38 U
-					1.8 U
					1.8 U
-11					1.8 U
					0.38 U
					1.8 U
					1.8 U
					0.38 U
11					0.38 U
41					0.38 U
-					1.8 U
╢——					0.38 U
3 200					0.38 U
1					
	0.74 U	0.75 U	0.71 U	0.76 U	0.76 U
	0.37 U	0.37 U	0.36 U	0.38 U	0.38 U
	(mg/kg)	C _{sat} (mg/kg) SB01-001 1-2 TCL Semivo 3,300 0.37 U 31,000 0.37 U 0.37 U <tr< td=""><td>C_{sat} (mg/kg) SB01-001 1-2 SP02-001 2-3 TCL Semivolatiles (mg/kg) 3,300 0.37 U 0.37 U 31,000 0.37 U 0.37 U 0.37 U 0.37 U <</td><td>C_{sat} (mg/kg) SB01-001 2-3 SP03-001 2-3 SP03-001 2-3 TCL Semivolatiles (mg/kg) 0.37 U 0.37 U 0.36 U 0.36 U 0.36 U 0.37 U 0.36 U 0.37 U 0.49 3,300 0.37 U 0.37 U 0.49 0.36 U 0.36 U 0.36 U 0.36 U 0.36 U 0.36 U 0.37 U</td><td> TCL Semivolatiles (mg/kg)</td></tr<>	C _{sat} (mg/kg) SB01-001 1-2 SP02-001 2-3 TCL Semivolatiles (mg/kg) 3,300 0.37 U 0.37 U 31,000 0.37 U 0.37 U 0.37 U 0.37 U <	C _{sat} (mg/kg) SB01-001 2-3 SP03-001 2-3 SP03-001 2-3 TCL Semivolatiles (mg/kg) 0.37 U 0.37 U 0.36 U 0.36 U 0.36 U 0.37 U 0.36 U 0.37 U 0.49 3,300 0.37 U 0.37 U 0.49 0.36 U 0.36 U 0.36 U 0.36 U 0.36 U 0.36 U 0.37 U	TCL Semivolatiles (mg/kg)

⁽¹⁾ mg/kg - miligrams per kilogram.
(2) TCL - Target compound list.
(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
(4) -- Soil saturation limits not available.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	and surface)/Conce	ntration
	C_{sat}	SB01-001	SP02-001	SP03-001	SP05-001	SP06-001
Compound/Analyte	(mg/kg)	1-2	2-3	2-3	2-3	2-3
		PAHs	(mg/kg)			
Acenaphthene		0.037	0.45	0.69	0.84	1.4
Acenaphthylene		0.032	1.2	0.32	1.3	0.59
Anthracene		0.27	1.5	0.75	1.1	1.7
Benzo(a)anthracene		0.34	3.5	2.5	3	3.3
Benzo(b)fluoranthene		0.44	2.2	1.8	1.9	2
Benzo(k)fluoranthene		0.44	2.7	1.6	2.5	2.4
Benzo(g,h,i)perylene		0.31	2	0.94	1.2	1.4
Benzo(a)pyrene		0.32	3.1	2.3	3.3	3.3
Chrysene		0.71	4.1	2.5	3.5	4.2
Dibenzo(a,h)anthracene		0.16	0.81	0.39	0.55	0.71
Fluoranthene		1.4	6.2	4.1	4.3	7.2
Fluorene		0.067	0.63	0.65	0.77	1.5
Indeno(1,2,3-cd)pyrene		0.31	2	0.93	1.3	1.6
Naphthalene		0.36	0.84	0.75	0.22	4.2
Phenanthrene		0.64	3.8	3.7	2.9	7
Pyrene		1.5	8.6	4.5	6.6	6.1
		PCBs	(mg/kg)			
Aroclor 1016		0.09 U	0.09 U	0.084 U	0.092 U	0.092 U
Aroclor 1221		0.09 U	0.09 U	0.084 U	0.092 U	0.092 U
Aroclor 1232		0.09 U	0.09 U	0.084 U	0.092 U	0.092 U
Aroclor 1242		0.09 U	0.094	0.4	0.092 U	0.29
Aroclor 1248		0.09 U	0.09 U	0.084 U	0.092 U	0.092 U
Aroclor 1254		0.18 U	0.18 U	0.33	0.19 U	0.29
Aroclor 1260		0.18 U	0.18 U	0.16 U	0.19 U	0.18 U
Subtotal of PCBs:	50*	0.8	0.8	1.2	0.8	1.1
Subtotal:		8.1	44.4	29.6	36.1	49.7
Total Organic Content:	6,000**	38	76	61	67	85

- (1) mg/kg miligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) -- Soil saturation limits not available.
- (4) PCBs Polychlorinated Biphenyls.
- (5) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
 (6) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
 (7) ** 6,000 mg/kg is the natural organic carbon fraction (foc) default value for surface soil.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration							
	C_{sat}	SP07-001	SP08-001	SB10-001	SP10-001	SP11-001			
Compound/Analyte	(mg/kg)	1-2	0-0.5	1-2	0-2	0-0.5			
		TCL Vola	tiles (mg/kg)						
Acetone	100,000	0.06 U	0.047 U	0.062	0.23 J	0.057 U			
Benzene	870	0.012 U	0.0095 U	0.0092	15 J	0.011 U			
Bromodichloromethane	3,000	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
Bromoform	1,900	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
Bromomethane	3,200	0.024 U	0.019 U	0.015 U	0.028 U	0.023 U			
2-Butanone		0.024 U	0.019 U	0.015 U	0.056 J	0.023 U			
Carbon Disulfide	720	0.04	0.0095 U	0.0074 U	0.014 U	0.011 U			
Carbon Tetrachloride	1,100	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
Chlorobenzene	680	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
Chloroethane		0.024 U	0.019 U	0.015 U	0.028 U	0.023 U			
Chloroform	2,900	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
Chloromethane		0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
Dibromochloromethane	1,300	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
1,1-Dichloroethane	1,700	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
1,2-Dichloroethane	1,800	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
1,1-Dichloroethene	1,500	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
cis-1,2-Dichloroethene		0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
trans-1,2-Dichloroethene		0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
1,2-Dichloropropane	1,100	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
cis-1,3-Dichloropropene	1,400	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
trans-1,3-Dichloropropene	1,400	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
Ethylbenzene	400	0.013	0.0095 U	0.014	67 J	0.011 U			
2-Hexanone		0.024 U	0.019 U	0.015 U	0.028 U	0.023 U			
4-Methyl-2-Pentanone		0.024 U	0.019 U	0.015 U	0.028 U	0.023 U			
Methylene	2,400	0.024 U	0.019 U	0.015 U	0.028 U	0.023 U			
Styrene	1,500	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
1,1,2,2-Tetrachloroethane		0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
Tetrachloroethene	240	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
Toluene	650	0.012	0.0095 U	0.0087	28 J	0.011 U			
1,1,1-Trichloroethane	1,200	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
1,1,2-Trichloroethane	1,800	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
Trichloroethene	1,300	0.012 U	0.0095 U	0.0074 U	0.014 U	0.011 U			
Vinyl Chloride	1,200	0.024 U	0.019 U	0.015 U	0.028 U	0.023 U			
m,p-Xylene	420	0.016	0.0095 U	0.021	53 J	0.011 U			
o-Xylene	410	0.012 U	0.0095 U	0.014	31 J	0.011 U			
Subtotal		0.6	0.4	0.4	194.8	0.5			

- NOTES:

 (1) mg/kg miligrams per kilogram.
 (2) TCL Target compound list.
 (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
 (4) -- Soil saturation limits not available.
 (5) J Indicates an estimated value.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dept	th (feet below grou	ind surface)/Conce	ntration
	C_{sat}	SP07-001	SP08-001	SB10-001	SP10-001	SP11-001
Compound/Analyte	(mg/kg)	1-2	0-0.5	1-2	0-2	0-0.5
		TCL Semivo	olatiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
Bis(2-chloroethyl)ether	3,300	0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
Bis(2-ethylhexyl)phthalate	31,000	0.37 U	2.9	2.1	1.7 U	1.1
4-Bromophenyl phenyl ether		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
Butyl benzyl phthalate	930	0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
Carbazole		0.47	0.41 U	1.1	1.7 U	0.38 U
4-Chloro-3-methylphenol		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
4-Chloroaniline		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
2-Chloronaphthalene		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
2-Chlorophenol	53,000	0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
4-Chlorophenyl phenyl ether		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
Dibenzofuran		0.37 U	0.41 U	2	61	0.38 U
1,2-Dichlorobenzene	560	0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
1,3-Dichlorobenzene		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
1,4-Dichlorobenzene		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
3,3´-Dichlorobenzidine		0.74 U	0.81 U	0.72 U	3.5 U	0.76 U
2,4-Dichlorophenol		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
Diethyl phthalate	2,000	0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
Dimethyl phthalate		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
Di-n-butyl phthalate	2,300	0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
2,4-Dimethylphenol		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
4,6-Dinitro-2-methylphenol		1.8 U	2 U	1.8 U	8.4 U	1.8 U
2,4-Dinitrophenol		1.8 U	2 U	1.8 U	8.4 U	1.8 U
2,4-Dinitrotoluene		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
2,6-Dinitrotoluene		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
Di-n-octyl phthalate	10,000	0.37 U	0.71	0.36 U	1.7 U	0.38 U
Hexachlorobenzene		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
Hexachlorobutadiene		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
Hexachlorocyclopentadiene	2,200	0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
Hexachloroethane		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
Isophorone	4,600	0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
2-Methylnaphthalene		0.4	0.41 U	27	1,200	1.1
2-Methylphenol		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
4-Methylphenol		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
2-Nitroaniline		1.8 U	2 U	1.8 U	8.4 U	1.8 U
3-Nitroaniline		1.8 U	2 U	1.8 U	8.4 U	1.8 U
4-Nitroaniline		1.8 U	2 U	1.8 U	8.4 U	1.8 U
Nitrobenzene	1,000	0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
2-Nitrophenol		1.8 U	2 U	1.8 U	8.4 U	1.8 U
4-Nitrophenol		1.8 U	2 U	1.8 U	8.4 U	1.8 U
N-Nitrosodi-n-propylamine		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
N-Nitrosodiphenylamine		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.017 U	0.015 U	0.074 U	0.016 U
Pentachlorophenol		1.8 U	2 U	1.8 U	8.4 U	1.8 U
Phenol		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
1,2,4-Trichlorobenzene	3,200	0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
2,4,5-Trichlorophenol		0.74 U	0.81 U	0.72 U	3.5 U	0.76 U
2,4,6-Trichlorophenol		0.37 U	0.41 U	0.36 U	1.7 U	0.38 U
Subtota	1.	29.7	35.6	59.9	1,394.8	31.4

NOTES:

(1) mg/kg - miligrams per kilogram.

(2) TCL - Target compound list.

(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

(4) -- Soil saturation limits not available.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration						
	C_{sat}	SP07-001	SP08-001	SB10-001	SP10-001	SP11-001		
Compound/Analyte	(mg/kg)	1-2	0-0.5	1-2	0-2	0-0.5		
		PAHs	(mg/kg)					
Acenaphthene		0.28 U	0.031 U	2.4	260	1.1		
Acenaphthylene		0.39	0.28	1.9	170	0.86		
Anthracene		0.54	0.4	7.1	150	2.5		
Benzo(a)anthracene		1.5	1.4	1.6	44	0.9		
Benzo(b)fluoranthene		1.3	1.2	3.5	20	1.7		
Benzo(k)fluoranthene		0.98	0.9	3.4	18	1.6		
Benzo(g,h,i)perylene		0.77	0.9	3.6	15	0.62		
Benzo(a)pyrene		1.6	1.7	3.9	24	1.8		
Chrysene		1.6	1.5	9	140	3.1		
Dibenzo(a,h)anthracene		0.28 U	0.33	1.2	9.7	0.3		
Fluoranthene		2.5	1.7	11	130	3.7		
Fluorene		0.28 U	0.078	6.9	140	1.3		
Indeno(1,2,3-cd)pyrene		0.71	0.83	2.6	16	0.44		
Naphthalene		0.28	0.041	10	580	1.5		
Phenanthrene		2.1	1	24	490	6.5		
Pyrene		2.8	2.1	14	200	7.8		
		PCBs	(mg/kg)					
Aroclor 1016		0.091 U	0.099 U	0.09 U	0.083 U	0.092 U		
Aroclor 1221		0.091 U	0.099 U	0.09 U	0.083 U	0.092 U		
Aroclor 1232		0.091 U	0.099 U	0.09 U	0.083 U	0.092 U		
Aroclor 1242		1.5	0.37	3.9	0.15	0.49		
Aroclor 1248		0.091 U	0.099 U	0.09 U	0.083 U	0.092 U		
Aroclor 1254		0.91 U	0.28	3.3	0.17 U	0.45		
Aroclor 1260		0.18 U	0.2 U	0.18 U	0.17 U	0.18 U		
Subtotal of PCBs:	50*	3.0	1.2	7.7	0.8	1.5		
Subtotal:		20.9	15.6	113.8	2,407.5	37.2		
Total Organic Content:	6,000**	51	52	174	3,997	69		

- (1) mg/kg miligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) -- Soil saturation limits not available.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) PCBs Polychlorinated Biphenyls.
- (6) * 50 mg/kg PCBs is defined as source material in accordance with TACO. (7) ** 6,000 mg/kg is the natural organic carbon fraction (foc) default value for surface soil.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration							
	C_{sat}	SP13-001	SB14-001	SB15-001	SP16-001	SB17-001			
Compound/Analyte	(mg/kg)	1-2	1-2	0-0.5	2-3	1-2			
	,	TCL Vola	tiles (mg/kg)						
Acetone	100,000	0.062	0.051 U	0.037 U	0.053 U	0.06 U			
Benzene	870	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
Bromodichloromethane	3,000	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
Bromoform	1,900	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
Bromomethane	3,200	0.025 U	0.02 U	0.015 U	0.021 U	0.024 U			
2-Butanone		0.025 U	0.02 U	0.015 U	0.021 U	0.024 U			
Carbon Disulfide	720	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
Carbon Tetrachloride	1,100	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
Chlorobenzene	680	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
Chloroethane		0.025 U	0.02 U	0.015 U	0.021 U	0.024 U			
Chloroform	2,900	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
Chloromethane		0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
Dibromochloromethane	1,300	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
1,1-Dichloroethane	1,700	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
1,2-Dichloroethane	1,800	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
1,1-Dichloroethene	1,500	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
cis-1,2-Dichloroethene		0.012 U	0.01 U	0.0074 U	0.053	0.012 U			
trans-1,2-Dichloroethene		0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
1,2-Dichloropropane	1,100	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
cis-1,3-Dichloropropene	1,400	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
trans-1,3-Dichloropropene	1,400	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
Ethylbenzene	400	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
2-Hexanone		0.025 U	0.02 U	0.015 U	0.021 U	0.024 U			
4-Methyl-2-Pentanone		0.025 U	0.02 U	0.015 U	0.021 U	0.024 U			
Methylene	2,400	0.025 U	0.02 U	0.015 U	0.021 U	0.024 U			
Styrene	1,500	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
1,1,2,2-Tetrachloroethane		0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
Tetrachloroethene	240	0.012 U	0.01 U	0.0074 U	0.1	0.012 U			
Toluene	650	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
1,1,1-Trichloroethane	1,200	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
1,1,2-Trichloroethane	1,800	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
Trichloroethene	1,300	0.012 U	0.01 U	0.0074 U	0.017	0.012 U			
Vinyl Chloride	1,200	0.025 U	0.02 U	0.015 U	0.021 U	0.024 U			
m,p-Xylene	420	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
o-Xylene	410	0.012 U	0.01 U	0.0074 U	0.011 U	0.012 U			
Subtotal:		0.6	0.5	0.3	0.6	0.6			

NOTES:

(1) mg/kg - miligrams per kilogram.

(2) TCL - Target compound list.

(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

(4) - Soil saturation limits not available.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dept	th (feet below grou	ind surface)/Conce	ntration
	C_{sat}	SP13-001	SB14-001	SB15-001	SP16-001	SB17-001
Compound/Analyte	(mg/kg)	1-2	1-2	0-0.5	2-3	1-2
		TCL Semivo	olatiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Bis(2-chloroethyl)ether	3,300	0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Bis(2-ethylhexyl)phthalate	31,000	0.36 U	0.49	0.58	1.6	0.94
4-Bromophenyl phenyl ether		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Butyl benzyl phthalate	930	0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Carbazole		0.36 U	0.35 U	0.4 U	0.75	0.36 U
4-Chloro-3-methylphenol		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
4-Chloroaniline		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
2-Chloronaphthalene		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
2-Chlorophenol	53,000	0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
4-Chlorophenyl phenyl ether		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Dibenzofuran		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
1,2-Dichlorobenzene	560	0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
1,3-Dichlorobenzene		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
1,4-Dichlorobenzene		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
3,3´-Dichlorobenzidine		0.73 U	0.71 U	0.81 U	0.73 U	0.73 U
2,4-Dichlorophenol		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Diethyl phthalate	2,000	0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Dimethyl phthalate		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Di-n-butyl phthalate	2,300	0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
2,4-Dimethylphenol		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
4,6-Dinitro-2-methylphenol		1.8 U	1.7 U	2 U	1.8 U	1.8 U
2,4-Dinitrophenol		1.8 U	1.7 U	2 U	1.8 U	1.8 U
2,4-Dinitrotoluene		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
2,6-Dinitrotoluene		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Di-n-octyl phthalate	10,000	0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Hexachlorobenzene		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Hexachlorobutadiene		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Hexachlorocyclopentadiene	2,200	0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Hexachloroethane		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Isophorone	4,600	0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
2-Methylnaphthalene		0.86	0.35 U	0.4 U	0.64	0.36 U
2-Methylphenol		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
4-Methylphenol		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
2-Nitroaniline		1.8 U	1.7 U	2 U	1.8 U	1.8 U
3-Nitroaniline		1.8 U	1.7 U	2 U	1.8 U	1.8 U
4-Nitroaniline		1.8 U	1.7 U	2 U	1.8 U	1.8 U
Nitrobenzene	1,000	0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
2-Nitrophenol		1.8 U	1.7 U	2 U	1.8 U	1.8 U
4-Nitrophenol		1.8 U	1.7 U	2 U	1.8 U	1.8 U
N-Nitrosodi-n-propylamine		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
N-Nitrosodiphenylamine		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
2, 2'-Oxybis(1-Chloropropane)		0.015 U	0.015 U	0.017 U	0.015 U	0.015 U
Pentachlorophenol		1.8 U	1.7 U	2 U	1.8 U	1.8 U
Phenol		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
1,2,4-Trichlorobenzene	3,200	0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
2,4,5-Trichlorophenol		0.73 U	0.71 U	0.81 U	0.73 U	0.73 U
2,4,6-Trichlorophenol		0.36 U	0.35 U	0.4 U	0.36 U	0.36 U
Subtota	1.	29.7	28.1	32.6	31.1	29.8

⁽¹⁾ mg/kg - miligrams per kilogram.
(2) TCL - Target compound list.
(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
(4) -- Soil saturation limits not available.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	entration
	C_{sat}	SP13-001	SB14-001	SB15-001	SP16-001	SB17-001
Compound/Analyte	(mg/kg)	1-2	1-2	0-0.5	2-3	1-2
		PAHs	(mg/kg)			
Acenaphthene		0.16	0.15	0.031 U	0.5	0.036
Acenaphthylene		0.069	0.18	0.13	0.15	0.049
Anthracene		0.13	0.25	0.031 U	0.81	0.21
Benzo(a)anthracene		0.037	3.5	0.15	0.36	0.089
Benzo(b)fluoranthene		0.13	1.8	0.13	0.92	0.15
Benzo(k)fluoranthene		0.11	1.6	0.13	1.1	0.12
Benzo(g,h,i)perylene		0.2	0.66	0.17	0.81	0.034
Benzo(a)pyrene		0.094	3	0.2	0.75	0.069
Chrysene		0.26	3.2	0.21	2.3	0.087
Dibenzo(a,h)anthracene		0.084	0.35	0.057	0.28	0.028 U
Fluoranthene		0.21	4.2	0.24	1.8	0.12
Fluorene		0.15	0.15	0.031 U	0.44	0.046
Indeno(1,2,3-cd)pyrene		0.14	0.67	0.14	0.54	0.034
Naphthalene		0.83	0.19	0.031 U	0.64	0.051
Phenanthrene		0.34	0.3	0.17	2.2	0.21
Pyrene		0.28	11	0.33	2.7	0.18
		PCBs	(mg/kg)			
Aroclor 1016		0.09 U	0.085 U	0.096 U	0.088 U	0.088 U
Aroclor 1221		0.09 U	0.085 U	0.096 U	0.088 U	0.088 U
Aroclor 1232		0.09 U	0.085 U	0.096 U	0.088 U	0.088 U
Aroclor 1242		0.98	0.12	0.22	4.7	0.15
Aroclor 1248		0.09 U	0.085 U	0.096 U	0.088 U	0.088 U
Aroclor 1254		0.9 U	0.17 U	0.2 U	4.3	0.18 U
Aroclor 1260		0.18 U	0.17 U	0.2 U	0.18 U	0.18 U
Subtotal of PCBs:	50*	2.4	0.8	1.0	9.5	0.9
Subtotal:		5.6	32.0	3.2	25.8	2.4
Total Organic Content:	6,000**	36	61	36	58	33

- (1) mg/kg miligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) -- Soil saturation limits not available.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (5) PCBs Polychlorinated Biphenyls.
 (6) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
 (7) ** 6,000 mg/kg is the natural organic carbon fraction (foc) default value for surface soil.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration				
	C_{sat}	SB18-001	SB19-001	SB20-001	SB21-001	SB22-001
Compound/Analyte	(mg/kg)	1-2	1-2	0-0.5	1-2	2-3
	-	TCL Vola	tiles (mg/kg)			
Acetone	100,000	0.062 U	0.05	0.12	0.036	0.11 J
Benzene	870	0.012 U	0.039	0.0084 U	0.077	13
Bromodichloromethane	3,000	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
Bromoform	1,900	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
Bromomethane	3,200	0.025 U	0.016 U	0.017 U	0.013 U	0.017 UJ
2-Butanone		0.025 U	0.016 U	0.017 U	0.013 U	0.017 UJ
Carbon Disulfide	720	0.012 U	0.0081 U	0.011	0.0065 U	0.034 J
Carbon Tetrachloride	1,100	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
Chlorobenzene	680	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
Chloroethane		0.025 U	0.016 U	0.017 U	0.013 U	0.017 UJ
Chloroform	2,900	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
Chloromethane		0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
Dibromochloromethane	1,300	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
1,1-Dichloroethane	1,700	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
1,2-Dichloroethane	1,800	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
1,1-Dichloroethene	1,500	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
cis-1,2-Dichloroethene		0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
trans-1,2-Dichloroethene		0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
1,2-Dichloropropane	1,100	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
cis-1,3-Dichloropropene	1,400	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
trans-1,3-Dichloropropene	1,400	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
Ethylbenzene	400	0.012 U	0.22	0.014	0.12	120
2-Hexanone		0.025 U	0.016 U	0.017 U	0.013 U	0.017 UJ
4-Methyl-2-Pentanone		0.025 U	0.016 U	0.017 U	0.013 U	0.017 UJ
Methylene	2,400	0.025 U	0.016 U	0.017 U	0.013 U	0.017 UJ
Styrene	1,500	0.012 U	0.0081 U	0.0084 U	0.0065 U	15
1,1,2,2-Tetrachloroethane		0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
Tetrachloroethene	240	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
Toluene	650	0.012 U	0.064	0.0097	0.018	74
1,1,1-Trichloroethane	1,200	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
1,1,2-Trichloroethane	1,800	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
Trichloroethene	1,300	0.012 U	0.0081 U	0.0084 U	0.0065 U	0.0085 UJ
Vinyl Chloride	1,200	0.025 U	0.016 U	0.017 U	0.013 U	0.017 UJ
m,p-Xylene	420	0.012 U	0.2	0.031	0.034	180
o-Xylene	410	0.012 U	0.12	0.011	0.036	110
Subtotal:		0.6	1.0	0.5	0.6	512.4

- NOTES:

 (1) mg/kg miligrams per kilogram.

 (2) TCL Target compound list.

 (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

 (4) -- Soil saturation limits not available.

 (5) J Indicates an estimated value.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dept	h (feet below grou	nd surface)/Conce	ntration
	C_{sat}	SB18-001	SB19-001	SB20-001	SB21-001	SB22-001
Compound/Analyte	(mg/kg)	1-2	1-2	0-0.5	1-2	2-3
		TCL Semivo	olatiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
Bis(2-chloroethyl)ether	3,300	0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
Bis(2-ethylhexyl)phthalate	31,000	1.2	0.63	2.7	0.59 J	1.8 U
4-Bromophenyl phenyl ether		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
Butyl benzyl phthalate	930	0.35 U	0.36 U	0.58	0.38 U	1.8 U
Carbazole		0.35 U	3.2	0.53	0.91 J	7.3 J
4-Chloro-3-methylphenol		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
4-Chloroaniline		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
2-Chloronaphthalene		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
2-Chlorophenol	53,000	0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
4-Chlorophenyl phenyl ether		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
Dibenzofuran		0.35 U	0.94	0.38 U	0.9 J	45 J
1,2-Dichlorobenzene	560	0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
1,3-Dichlorobenzene		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
1,4-Dichlorobenzene		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
3,3´-Dichlorobenzidine		0.7 U	0.72 U	0.75 U	0.75 U	3.7 U
2,4-Dichlorophenol		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
Diethyl phthalate	2,000	0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
Dimethyl phthalate		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
Di-n-butyl phthalate	2,300	0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
2,4-Dimethylphenol		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
4,6-Dinitro-2-methylphenol		1.7 U	1.7 U	1.8 U	1.8 U	8.9 U
2,4-Dinitrophenol		1.7 U	1.7 U	1.8 U	1.8 U	8.9 U
2,4-Dinitrotoluene		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
2,6-Dinitrotoluene		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
Di-n-octyl phthalate	10,000	1.6	0.36 U	0.38 U	0.38 U	1.8 U
Hexachlorobenzene		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
Hexachlorobutadiene		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
Hexachlorocyclopentadiene	2,200	0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
Hexachloroethane		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
Isophorone	4,600	0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
2-Methylnaphthalene		0.47	20	0.59	2.3 J	920 J
2-Methylphenol		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
4-Methylphenol		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
2-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	8.9 U
3-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	8.9 U
4-Nitroaniline		1.7 U	1.7 U	1.8 U	1.8 U	8.9 U
Nitrobenzene	1,000	0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
2-Nitrophenol		1.7 U	1.7 U	1.8 U	1.8 U	8.9 U
4-Nitrophenol		1.7 U	1.7 U	1.8 U	1.8 U	8.9 U
N-Nitrosodi-n-propylamine		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
N-Nitrosodiphenylamine		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
2, 2'-Oxybis(1-Chloropropane)		0.015 U	0.015 U	0.016 U	0.38 U	1.8 U
Pentachlorophenol		1.7 U	1.7 U	1.8 U	1.8 U	8.9 U
Phenol		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
1,2,4-Trichlorobenzene	3,200	0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
2,4,5-Trichlorophenol		0.7 U	0.72 U	0.75 U	0.75 U	3.7 U
2,4,6-Trichlorophenol		0.35 U	0.36 U	0.38 U	0.38 U	1.8 U
Subtota	1:	30.2	51.7	32.9	33.5	1,113.9

NOTES:
(1) mg/kg - miligrams per kilogram.
(2) TCL - Target compound list.
(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
(4) -- Soil saturation limits not available.
(5) J - Indicates an estimated value.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	entration
	C_{sat}	SB18-001	SB19-001	SB20-001	SB21-001	SB22-001
Compound/Analyte	(mg/kg)	1-2	1-2	0-0.5	1-2	2-3
		PAHs	s (mg/kg)			
Acenaphthene		0.19	3.1	0.31	3.3 J	110 J
Acenaphthylene		0.12	2.3	0.19	2.5 J	68 J
Anthracene		0.67	3.1	0.78	5 J	94 J
Benzo(a)anthracene		0.31	1.4	0.26	1.6 J	18 J
Benzo(b)fluoranthene		0.57	3.4	2	3.1 J	15 J
Benzo(k)fluoranthene		0.6	3	1.9	3.5 J	17 J
Benzo(g,h,i)perylene		0.8	3	0.89	3.7 J	12 J
Benzo(a)pyrene		0.41	2.7	0.67	4 J	14 U
Chrysene		1.7	5.4	1.4	5.6 J	95 J
Dibenzo(a,h)anthracene		0.25	1.3	0.3	1.1 J	4.8 J
Fluoranthene		1.2	7.4	2.4	8.1 J	72 J
Fluorene		0.3	3.2	0.31	3.6 J	130 J
Indeno(1,2,3-cd)pyrene		0.52	2.5	0.62	2.5 J	8.7 J
Naphthalene		0.42	13	0.47	2.4 J	600 J
Phenanthrene		1.9	9.7	2.5	13 J	350 J
Pyrene		1.8	8.9	1.9	14 J	150 J
		PCBs	(mg/kg)			
Aroclor 1016		0.085 U	0.087 U	0.091 U	0.091 U	0.089 U
Aroclor 1221		0.085 U	0.087 U	0.091 U	0.091 U	0.089 U
Aroclor 1232		0.085 U	0.087 U	0.091 U	0.091 U	0.089 U
Aroclor 1242		1.9	0.55	1.3	0.1	0.13
Aroclor 1248		0.085 U	0.087 U	0.091 U	0.091 U	0.089 U
Aroclor 1254		1.6	0.52	0.91 U	0.18 U	0.18 U
Aroclor 1260		0.17 U	0.17 U	0.18 U	0.18 U	0.18 U
Subtotal of PCBs:	50*	4.0	1.6	2.8	0.8	0.8
Subtotal:		15.8	75.0	19.7	77.8	1,759.3
Total Organic Content:	6,000**	47	128	53	112	3,386

- (1) mg/kg miligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) -- Soil saturation limits not available.
- (4) J Indicates an estimated value.
- (5) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (6) PCBs Polychlorinated Biphenyls.

 (7) * 50 mg/kg PCBs is defined as source material in accordance with TACO.

 (8) ** 6,000 mg/kg is the natural organic carbon fraction (foc) default value for surface soil.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration				
	C_{sat}	SB23-001	SB24-001	SB25-001	SB28-001	SB31-001
Compound/Analyte	(mg/kg)	1-2	1-2	1-2	2-3	2-3
		TCL Vola	tiles (mg/kg)			
Acetone	100,000	0.056 U	0.056 U	0.12	0.093	0.03
Benzene	870	0.011 U	0.011 U	1.5	0.041	0.024
Bromodichloromethane	3,000	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
Bromoform	1,900	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
Bromomethane	3,200	0.022 U	0.022 U	0.018 U	0.017 U	0.0084 U
2-Butanone		0.022 U	0.022 U	0.026	0.017 U	0.0084 U
Carbon Disulfide	720	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
Carbon Tetrachloride	1,100	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
Chlorobenzene	680	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
Chloroethane		0.022 U	0.022 U	0.018 U	0.017 U	0.0084 U
Chloroform	2,900	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
Chloromethane		0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
Dibromochloromethane	1,300	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
1,1-Dichloroethane	1,700	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
1,2-Dichloroethane	1,800	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
1,1-Dichloroethene	1,500	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
cis-1,2-Dichloroethene		0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
trans-1,2-Dichloroethene		0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
1,2-Dichloropropane	1,100	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
cis-1,3-Dichloropropene	1,400	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
trans-1,3-Dichloropropene	1,400	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
Ethylbenzene	400	0.011 U	0.016	2.8	0.059	0.038
2-Hexanone		0.022 U	0.022 U	0.018 U	0.017 U	0.0084 U
4-Methyl-2-Pentanone		0.022 U	0.022 U	0.018 U	0.017 U	0.0084 U
Methylene	2,400	0.022 U	0.022 U	0.018 U	0.017 U	0.0084 U
Styrene	1,500	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
1,1,2,2-Tetrachloroethane		0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
Tetrachloroethene	240	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
Toluene	650	0.011 U	0.011 U	0.03	0.0087 U	0.032
1,1,1-Trichloroethane	1,200	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
1,1,2-Trichloroethane	1,800	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
Trichloroethene	1,300	0.011 U	0.011 U	0.0091 U	0.0087 U	0.0042 U
Vinyl Chloride	1,200	0.022 U	0.022 U	0.018 U	0.017 U	0.0084 U
m,p-Xylene	420	0.011 U	0.011 U	0.068	0.012	0.047
o-Xylene	410	0.011 U	0.011 U	0.72	0.015	0.029
Subtotal:		0.5	0.5	5.6	0.5	0.4

NOTES:

(1) mg/kg - miligrams per kilogram.

(2) TCL - Target compound list.

(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

(4) -- Soil saturation limits not available.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration					
	C_{sat}	SB23-001	SB24-001	SB25-001	SB28-001	SB31-001	
Compound/Analyte	(mg/kg)	1-2	1-2	1-2	2-3	2-3	
		TCL Semivo	olatiles (mg/kg)				
Bis(2-chloroethoxy)methane		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Bis(2-chloroethyl)ether	3,300	1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Bis(2-ethylhexyl)phthalate	31,000	2.1	1.7 U	0.36 U	0.45	0.33 U	
4-Bromophenyl phenyl ether		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Butyl benzyl phthalate	930	1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Carbazole		1.8 U	4.1	1.9	0.39 U	0.33 U	
4-Chloro-3-methylphenol		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
4-Chloroaniline		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
2-Chloronaphthalene		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
2-Chlorophenol	53,000	1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
4-Chlorophenyl phenyl ether		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Dibenzofuran		1.8 U	1.7 U	0.84	0.5	0.33 U	
1,2-Dichlorobenzene	560	1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
1,3-Dichlorobenzene		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
1,4-Dichlorobenzene		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
3,3´-Dichlorobenzidine		3.7 U	3.5 U	0.72 U	0.78 U	0.33 U	
2,4-Dichlorophenol		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Diethyl phthalate	2,000	1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Dimethyl phthalate		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Di-n-butyl phthalate	2,300	1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
2,4-Dimethylphenol		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
4,6-Dinitro-2-methylphenol		8.9 U	8.4 U	1.7 U	1.9 U	1.7 U	
2,4-Dinitrophenol		8.9 U	8.4 U	1.7 U	1.9 U	1.7 U	
2,4-Dinitrotoluene		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
2,6-Dinitrotoluene		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Di-n-octyl phthalate	10,000	1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Hexachlorobenzene		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Hexachlorobutadiene		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Hexachlorocyclopentadiene	2,200	1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Hexachloroethane		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Isophorone	4,600	1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
2-Methylnaphthalene		1.8 U	1.7 U	4.1	1.1	0.33 U	
2-Methylphenol		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
4-Methylphenol		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
2-Nitroaniline		8.9 U	8.4 U	1.7 U	1.9 U	1.7 U	
3-Nitroaniline		8.9 U	8.4 U	1.7 U	1.9 U	1.7 U	
4-Nitroaniline		8.9 U	8.4 U	1.7 U	1.9 U	1.7 U	
Nitrobenzene	1,000	1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
2-Nitrophenol		8.9 U	8.4 U	1.7 U	1.9 U	1.7 U	
4-Nitrophenol		8.9 U	8.4 U	1.7 U	1.9 U	1.7 U	
N-Nitrosodi-n-propylamine		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
N-Nitrosodiphenylamine		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
2, 2'-Oxybis(1-Chloropropane)		0.078 U	0.073 U	0.015 U	0.39 U	0.33 U	
Pentachlorophenol		8.9 U	8.4 U	1.7 U	1.9 U	1.7 U	
Phenol		1.8 U	1.7 U	0.36 U	0.39 U	15	
1,2,4-Trichlorobenzene	3,200	1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
2,4,5-Trichlorophenol		3.7 U	3.5 U	0.72 U	0.78 U	0.66 U	
2,4,6-Trichlorophenol		1.8 U	1.7 U	0.36 U	0.39 U	0.33 U	
Subtota	l:	145.6	139.6	34.1	32.5	41.8	

⁽¹⁾ mg/kg - miligrams per kilogram.
(2) TCL - Target compound list.
(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
(4) -- Soil saturation limits not available.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	and surface)/Conce	ntration
	C_{sat}	SB23-001	SB24-001	SB25-001	SB28-001	SB31-001
Compound/Analyte	(mg/kg)	1-2	1-2	1-2	2-3	2-3
		PAHs	(mg/kg)			
Acenaphthene		2.1	0.63	8.3	1.7	0.44
Acenaphthylene		5	0.34	6.1	1.4	0.13 U
Anthracene		4.1	2.1	8.1	3.5	0.7
Benzo(a)anthracene		5.9	0.29	8	1.1	0.2
Benzo(b)fluoranthene		3.1	1.5	4	1.8	0.84
Benzo(k)fluoranthene		3.2	1.3	3.3	1.9	0.48
Benzo(g,h,i)perylene		1.6	1.5	2.3	3	1.5
Benzo(a)pyrene		5	1.7	5.1	2.6	0.91
Chrysene		6.6	3.6	9.1	3.8	1.5
Dibenzo(a,h)anthracene		1.4 U	0.72	0.84	0.89	0.13 U
Fluoranthene		9.4	6.4	16	0.051	0.67
Fluorene		2.4	0.67	7	1.1	0.53
Indeno(1,2,3-cd)pyrene		1.4 U	1.4	2.1	1.9	1.1
Naphthalene		1.8	0.65	6.7	1.4	0.68
Phenanthrene		10	5.4	30	0.038	2
Pyrene		14	7	24	0.097	1.1
		PCBs	(mg/kg)			
Aroclor 1016		0.089 U	0.087 U	0.086 U	0.093 U	0.083 U
Aroclor 1221		0.089 U	0.087 U	0.086 U	0.093 U	0.083 U
Aroclor 1232		0.089 U	0.087 U	0.086 U	0.093 U	0.083 U
Aroclor 1242		0.95	1.1	0.086 U	0.34	3.7
Aroclor 1248		0.089 U	0.087 U	0.086 U	0.093 U	0.083 U
Aroclor 1254		0.72	0.9	0.17 U	0.2	1.8
Aroclor 1260		0.18 U	0.17 U	0.17 U	0.19 U	0.17 U
Subtotal of PCBs:	50*	2.2	2.5	0.8	1.1	6.0
Subtotal:		79.2	37.7	141.7	27.4	18.9
Total Organic Content:	6,000**	225	178	181	60	61

- (1) mg/kg miligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) -- Soil saturation limits not available.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (5) PCBs Polychlorinated Biphenyls.
 (6) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
 (7) ** 6,000 mg/kg is the natural organic carbon fraction (foc) default value for surface soil.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration				
	C_{sat}	SB32-001	SB33-001	SP34-001	SP35-001	SP37-001
Compound/Analyte	(mg/kg)	2-3	0-0.5	0-0.5	1-2	1-2
		TCL Vola	tiles (mg/kg)			
Acetone	100,000	0.067 U	0.042 U	0.041 U	0.14	0.044 U
Benzene	870	5.2	0.0084 U	0.0083 U	0.0071 U	0.0088 U
Bromodichloromethane	3,000	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
Bromoform	1,900	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
Bromomethane	3,200	0.027 U	0.017 U	0.017 U	0.014 U	0.018 U
2-Butanone		0.027 U	0.017 U	0.017 U	0.015	0.018 U
Carbon Disulfide	720	0.013 U	0.0084 U	0.0083 U	0.013	0.0088 U
Carbon Tetrachloride	1,100	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
Chlorobenzene	680	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
Chloroethane		0.027 U	0.017 U	0.017 U	0.014 U	0.018 U
Chloroform	2,900	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
Chloromethane		0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
Dibromochloromethane	1,300	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
1,1-Dichloroethane	1,700	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
1,2-Dichloroethane	1,800	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
1,1-Dichloroethene	1,500	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
cis-1,2-Dichloroethene		0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
trans-1,2-Dichloroethene		0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
1,2-Dichloropropane	1,100	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
cis-1,3-Dichloropropene	1,400	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
trans-1,3-Dichloropropene	1,400	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
Ethylbenzene	400	1.5	0.01	0.015	0.0071 U	0.0088 U
2-Hexanone		0.027 U	0.017 U	0.017 U	0.014 U	0.018 U
4-Methyl-2-Pentanone		0.027 U	0.017 U	0.017 U	0.014 U	0.018 U
Methylene	2,400	0.027 U	0.017 U	0.017 U	0.014 U	0.018 U
Styrene	1,500	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
1,1,2,2-Tetrachloroethane		0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
Tetrachloroethene	240	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
Toluene	650	0.77	0.0084 U	0.013	0.0071 U	0.0088 U
1,1,1-Trichloroethane	1,200	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
1,1,2-Trichloroethane	1,800	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
Trichloroethene	1,300	0.013 U	0.0084 U	0.0083 U	0.0071 U	0.0088 U
Vinyl Chloride	1,200	0.027 U	0.017 U	0.017 U	0.014 U	0.018 U
m,p-Xylene	420	0.62	0.0084 U	0.043	0.0071 U	0.0088 U
o-Xylene	410	0.47	0.0084 U	0.033	0.0071 U	0.0088 U
Subtotal:		9.1	0.4	0.5	0.4	0.4

NOTES:

(1) mg/kg - miligrams per kilogram.

(2) TCL - Target compound list.

(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

(4) -- Soil saturation limits not available.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration					
	C_{sat}	SB32-001	SB33-001	SP34-001	SP35-001	SP37-001	
Compound/Analyte	(mg/kg)	2-3	0-0.5	0-0.5	1-2	1-2	
•		TCL Semivo	olatiles (mg/kg)				
Bis(2-chloroethoxy)methane		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Bis(2-chloroethyl)ether	3,300	0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Bis(2-ethylhexyl)phthalate	31,000	0.99	2 U	2	5.6	0.42 U	
4-Bromophenyl phenyl ether		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Butyl benzyl phthalate	930	0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Carbazole		0.46	2 U	1.8 U	0.47	0.67	
4-Chloro-3-methylphenol		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
4-Chloroaniline		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
2-Chloronaphthalene		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
2-Chlorophenol	53,000	0.33 U	2 U	1.8 U	0.36 U	0.42 U	
4-Chlorophenyl phenyl ether		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Dibenzofuran		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
1,2-Dichlorobenzene	560	0.33 U	2 U	1.8 U	0.36 U	0.42 U	
1,3-Dichlorobenzene		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
1,4-Dichlorobenzene		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
3.3´-Dichlorobenzidine		0.66 U	4.1 U	3.5 U	0.71 U	0.85 U	
2,4-Dichlorophenol		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Diethyl phthalate	2,000	0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Dimethyl phthalate		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Di-n-butyl phthalate	2,300	0.33 U	6.3	1.8 U	0.36 U	0.42 U	
2,4-Dimethylphenol		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
4,6-Dinitro-2-methylphenol		1.6 U	9.9 U	8.6 U	1.7 U	2.1 U	
2,4-Dinitrophenol		1.6 U	9.9 U	8.6 U	1.7 U	2.1 U	
2,4-Dinitrotoluene		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
2,6-Dinitrotoluene		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Di-n-octyl phthalate	10,000	0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Hexachlorobenzene		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Hexachlorobutadiene		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Hexachlorocyclopentadiene	2,200	0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Hexachloroethane		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Isophorone	4,600	0.33 U	2 U	1.8 U	0.36 U	0.42 U	
2-Methylnaphthalene		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
2-Methylphenol		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
4-Methylphenol		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
2-Nitroaniline		1.6 U	9.9 U	8.6 U	1.7 U	2.1 U	
3-Nitroaniline		1.6 U	9.9 U	8.6 U	1.7 U	2.1 U	
4-Nitroaniline		1.6 U	9.9 U	8.6 U	1.7 U	2.1 U	
Nitrobenzene	1,000	0.33 U	2 U	1.8 U	0.36 U	0.42 U	
2-Nitrophenol		1.6 U	9.9 U	8.6 U	1.7 U	2.1 U	
4-Nitrophenol		1.6 U	9.9 U	8.6 U	1.7 U	2.1 U	
N-Nitrosodi-n-propylamine		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
N-Nitrosodiphenylamine		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
2, 2'-Oxybis(1-Chloropropane)		0.014 U	0.087 U	0.075 U	0.015 U	0.018 U	
Pentachlorophenol		1.6 U	9.9 U	8.6 U	1.7 U	2.1 U	
Phenol		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
1,2,4-Trichlorobenzene	3,200	0.33 U	2 U	1.8 U	0.36 U	0.42 U	
2,4,5-Trichlorophenol		0.66 U	4.1 U	3.5 U	0.71 U	0.85 U	
2,4,6-Trichlorophenol		0.33 U	2 U	1.8 U	0.36 U	0.42 U	
Subtota	1.	27.1	165.8	142.7	33.7	34.3	

⁽¹⁾ mg/kg - miligrams per kilogram.
(2) TCL - Target compound list.
(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
(4) -- Soil saturation limits not available.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample 1	Location and Dept	h (feet below grou	ind surface)/Conce	entration
	C_{sat}	SB32-001	SB33-001	SP34-001	SP35-001	SP37-001
Compound/Analyte	(mg/kg)	2-3	0-0.5	0-0.5	1-2	1-2
		PAHs	(mg/kg)			
Acenaphthene		0.8	1.5 U	0.13 U	0.11	0.13
Acenaphthylene		1.2	1.6	0.19	0.082	0.074
Anthracene		1.5	1.8	0.36	0.15	0.33
Benzo(a)anthracene		2.7	2.8	0.13 U	0.19	0.17
Benzo(b)fluoranthene		1.2	1.7	0.24	0.47	0.38
Benzo(k)fluoranthene		0.76	1.5 U	0.24	0.53	0.87
Benzo(g,h,i)perylene		0.61	1.5 U	0.57	0.57	0.35
Benzo(a)pyrene		1.7	1.8	0.13	0.33	0.32
Chrysene		2.5	3.2	0.75	0.71	1.1
Dibenzo(a,h)anthracene		0.25 U	1.5 U	0.13 U	0.076	0.19
Fluoranthene		3.4	3.7	0.21	0.55	2
Fluorene		1	1.5 U	0.13 U	0.086	0.12
Indeno(1,2,3-cd)pyrene		0.56	1.5 U	0.29	0.18	0.36
Naphthalene		0.25 U	2.1	0.38	0.16	0.18
Phenanthrene		3.8	4.1	1.3	0.7	1
Pyrene		4.6	5.5	0.36	0.63	2.1
		PCBs	(mg/kg)			
Aroclor 1016		0.085 U	0.088 U	0.87 U	0.086 U	0.1 U
Aroclor 1221		0.085 U	0.088 U	0.87 U	0.086 U	0.1 U
Aroclor 1232		0.085 U	0.088 U	0.87 U	0.086 U	0.1 U
Aroclor 1242		1.3	2.5	0.87 U	8.5	0.1 U
Aroclor 1248		0.085 U	0.088 U	0.87 U	0.086 U	0.1 U
Aroclor 1254		1.1	2.2	1.7 U	6	0.2 U
Aroclor 1260		0.17 U	0.18 U	1.7 U	0.17 U	0.2 U
Subtotal of PCBs:	50*	2.9	5.2	7.8	15.0	0.9
Subtotal:		29.7	42.5	13.3	20.5	10.6
Total Organic Content:	6,000**	66	209	156	55	45

- (1) mg/kg miligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) -- Soil saturation limits not available.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) PCBs Polychlorinated Biphenyls.
- (6) * 50 mg/kg PCBs is defined as source material in accordance with TACO. (7) ** 6,000 mg/kg is the natural organic carbon fraction (foc) default value for surface soil.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	and surface)/Conce	entration
	C_{sat}	SP39-001	SP40-001	SP43-001	SP44-001	SB45-001
Compound/Analyte	(mg/kg)	1-2	2-3	2-3	0-0.5	0-0.5
		TCL Vola	tiles (mg/kg)			
Acetone	100,000	0.036 U	0.13	0.15	0.079 U	0.065
Benzene	870	0.0071 U	0.015 U	0.013 U	0.016 U	0.12
Bromodichloromethane	3,000	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
Bromoform	1,900	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
Bromomethane	3,200	0.014 U	0.029 U	0.027 U	0.031 U	0.019 U
2-Butanone		0.014 U	0.029 U	0.031	0.031 U	0.034
Carbon Disulfide	720	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
Carbon Tetrachloride	1,100	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
Chlorobenzene	680	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
Chloroethane		0.014 U	0.029 U	0.027 U	0.031 U	0.019 U
Chloroform	2,900	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
Chloromethane		0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
Dibromochloromethane	1,300	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
1,1-Dichloroethane	1,700	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
1,2-Dichloroethane	1,800	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
1,1-Dichloroethene	1,500	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
cis-1,2-Dichloroethene		0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
trans-1,2-Dichloroethene		0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
1,2-Dichloropropane	1,100	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
cis-1,3-Dichloropropene	1,400	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
trans-1,3-Dichloropropene	1,400	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
Ethylbenzene	400	0.0071 U	0.015 U	0.013 U	0.016 U	0.37
2-Hexanone		0.014 U	0.029 U	0.027 U	0.031 U	0.019 U
4-Methyl-2-Pentanone		0.014 U	0.029 U	0.027 U	0.031 U	0.019 U
Methylene	2,400	0.014 U	0.029 U	0.027 U	0.031 U	0.019 U
Styrene	1,500	0.0071 U	0.015 U	0.013 U	0.016 U	0.014
1,1,2,2-Tetrachloroethane		0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
Tetrachloroethene	240	0.0071 U	0.015 U	0.013 U	0.023	0.0094 U
Toluene	650	0.008	0.015 U	0.013 U	0.016 U	0.025
1,1,1-Trichloroethane	1,200	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
1,1,2-Trichloroethane	1,800	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
Trichloroethene	1,300	0.0071 U	0.015 U	0.013 U	0.016 U	0.0094 U
Vinyl Chloride	1,200	0.014 U	0.029 U	0.027 U	0.031 U	0.019 U
m,p-Xylene	420	0.0071 U	0.015 U	0.013 U	0.016 U	0.057
o-Xylene	410	0.0071 U	0.015 U	0.013 U	0.016 U	0.17
Subtotal:		0.3	0.7	0.7	0.7	1.2

NOTES:

(1) mg/kg - miligrams per kilogram.

(2) TCL - Target compound list.

(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

(4) -- Soil saturation limits not available.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration					
	C_{sat}	SP39-001	SP40-001	SP43-001	SP44-001	SB45-001	
Compound/Analyte	(mg/kg)	1-2	2-3	2-3	0-0.5	0-0.5	
	(338,38)		olatiles (mg/kg)				
Bis(2-chloroethoxy)methane		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
Bis(2-chloroethyl)ether	3,300	1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
Bis(2-ethylhexyl)phthalate	31,000	1.7 U	170	0.43 U	9.7	2.1	
4-Bromophenyl phenyl ether		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
Butyl benzyl phthalate	930	1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
Carbazole		1.7 U	1.9 U	0.43 U	1.9 U	0.87	
4-Chloro-3-methylphenol		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
4-Chloroaniline		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
2-Chloronaphthalene		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
2-Chlorophenol	53,000	1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
4-Chlorophenyl phenyl ether		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
Dibenzofuran		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
1,2-Dichlorobenzene	560	1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
1,3-Dichlorobenzene		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
1,4-Dichlorobenzene		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
3,3´-Dichlorobenzidine		3.5 U	3.8 U	0.85 U	3.9 U	0.69 U	
2,4-Dichlorophenol		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
Diethyl phthalate	2,000	1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
Dimethyl phthalate		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
Di-n-butyl phthalate	2,300	1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
2,4-Dimethylphenol		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
4,6-Dinitro-2-methylphenol		8.4 U	9.1 U	2.1 U	9.4 U	1.7 U	
2,4-Dinitrophenol		8.4 U	9.1 U	2.1 U	9.4 U	1.7 U	
2,4-Dinitrotoluene		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
2,6-Dinitrotoluene		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
Di-n-octyl phthalate	10,000	1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
Hexachlorobenzene		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
Hexachlorobutadiene		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
Hexachlorocyclopentadiene	2,200	1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
Hexachloroethane		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
Isophorone	4,600	1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
2-Methylnaphthalene		1.7 U	1.9 U	0.43 U	1.9 U	1.7	
2-Methylphenol		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
4-Methylphenol		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
2-Nitroaniline		8.4 U	9.1 U	2.1 U	9.4 U	1.7 U	
3-Nitroaniline		8.4 U	9.1 U	2.1 U	9.4 U	1.7 U	
4-Nitroaniline	1.000	8.4 U 1.7 U	9.1 U 1.9 U	2.1 U 0.43 U	9.4 U	1.7 U	
Nitrobenzene	1,000				1.9 U	0.35 U	
2-Nitrophenol		8.4 U	9.1 U	2.1 U	9.4 U	1.7 U	
4-Nitrophenol		8.4 U	9.1 U	2.1 U	9.4 U	1.7 U	
N-Nitrosodi-n-propylamine		1.7 U	1.9 U	0.43 U	1.9 U	0.35 U	
N-Nitrosodiphenylamine 2, 2'-Oxybis(1-Chloropropane)		1.7 U 0.074 U	1.9 U 0.08 U	0.43 U 0.018 U	1.9 U 0.082 U	0.35 U 0.015 U	
Pentachlorophenol	-	8.4 U	9.1 U	2.1 U	9.4 U	1.7 U	
Phenol		1.7 U	2.3	0.43 U	9.4 U 1.9 U	0.35 U	
1,2,4-Trichlorobenzene	3,200	1.7 U	2.3 1.9 U	0.43 U	1.9 U	0.35 U	
2,4,5-Trichlorophenol	5,200	3.5 U	3.8 U	0.45 U	3.9 U	0.55 U 0.69 U	
2,4,6-Trichlorophenol		1.7 U	1.9 U	0.43 U	1.9 U	0.09 U	
Subtotal		137.2	319.3	34.4	161.2	31.6	

NOTES:

(1) mg/kg - miligrams per kilogram.

(2) TCL - Target compound list.

(3) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

(4) -- Soil saturation limits not available.

Potential Source Material Calculations for Surface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dept	th (feet below grou	ind surface)/Conce	ntration
	C_{sat}	SP39-001	SP40-001	SP43-001	SP44-001	SB45-001
Compound/Analyte	(mg/kg)	1-2	2-3	2-3	0-0.5	0-0.5
		PAHs	(mg/kg)			
Acenaphthene		1.3 U	0.38	0.072	0.15 U	0.74
Acenaphthylene		1.3 U	0.47	0.17	0.15 U	0.65
Anthracene		1.3 U	0.45	0.032 U	0.16	1.9
Benzo(a)anthracene		1.3 U	0.14	0.045	0.15 U	2.5
Benzo(b)fluoranthene		1.3 U	1.8	0.12	0.78	2
Benzo(k)fluoranthene		1.3 U	1.5	0.098	0.81	1.9
Benzo(g,h,i)perylene		1.3 U	1.5	0.062	1.1	1.3
Benzo(a)pyrene		1.3 U	1.2	0.056	0.45	2.4
Chrysene		1.3 U	2.9	0.3	0.83	3.9
Dibenzo(a,h)anthracene		1.3 U	0.57	0.032 U	0.25	0.37
Fluoranthene		1.3 U	3.8	0.15	0.45	4.1
Fluorene		1.3 U	0.32	0.032 U	0.15 U	1.2
Indeno(1,2,3-cd)pyrene		1.3 U	0.98	0.043	0.69	0.94
Naphthalene		1.3 U	0.25	0.062	0.15 U	1.8
Phenanthrene		1.3	1.7	0.19	0.42	3.6
Pyrene		2	5	0.14	0.64	6.8
		PCBs	(mg/kg)			
Aroclor 1016		0.087 U	0.094 U	0.1 U	0.094 U	0.084 U
Aroclor 1221		0.087 U	0.094 U	0.1 U	0.094 U	0.084 U
Aroclor 1232		0.087 U	0.094 U	0.1 U	0.094 U	0.084 U
Aroclor 1242		0.087 U	31	0.1 U	1.5	5.2 U
Aroclor 1248		0.087 U	0.094 U	0.1 U	0.094 U	0.084 U
Aroclor 1254		0.17 U	24	0.21 U	1	5.2 U
Aroclor 1260		0.17 U	0.19 U	0.21 U	0.19 U	0.17 U
Subtotal of PCBs:	50*	0.8	55.6	0.9	3.1	10.9
Subtotal:		22.3	78.5	2.5	10.4	47.0
Total Organic Content:	6,000**	160	399	38	172	80

- (1) mg/kg miligrams per kilogram.
- (2) PAHs Polynuclear Aromatic Hydrocarbons.
- (3) -- Soil saturation limits not available.
- (4) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (5) PCBs Polychlorinated Biphenyls.
- (6) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (7) Shaded value exceeds the source material criteria for PCBs.
- (8) ** 6,000 mg/kg is the natural organic carbon fraction (foc) default value for surface soil.

Table 10 Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	C_{sat}	SB01-002	SP02-002	SP03-002	SB04-001	SP05-002
Compound/Analyte	(mg/kg)	8-10	3-4	4-5	5-7	9-10
•		TCL Vola	tiles (mg/kg)			
Acetone	100,000	0.041 U	0.091	0.32	0.061 U	0.061
Benzene	870	0.0082 U	0.015	0.017 U	0.012 U	0.012 U
Bromodichloromethane	3,000	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
Bromoform	1,900	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
Bromomethane	3,200	0.016 U	0.016 U	0.034 U	0.025 U	0.023 U
2-Butanone		0.016 U	0.02	0.072	0.025 U	0.023 U
Carbon Disulfide	720	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
Carbon Tetrachloride	1,100	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
Chlorobenzene	680	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
Chloroethane		0.016 U	0.016 U	0.034 U	0.025 U	0.023 U
Chloroform	2,900	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
Chloromethane		0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
Dibromochloromethane	1,300	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
1,1-Dichloroethane	1,700	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
1,2-Dichloroethane	1,800	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
1,1-Dichloroethene	1,500	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
cis-1,2-Dichloroethene		0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
trans-1,2-Dichloroethene		0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
1,2-Dichloropropane	1,100	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
cis-1,3-Dichloropropene	1,400	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
trans-1,3-Dichloropropene	1,400	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
Ethylbenzene	400	0.0082 U	0.049	0.017 U	0.012 U	0.012 U
2-Hexanone		0.016 U	0.016 U	0.034 U	0.025 U	0.023 U
4-Methyl-2-Pentanone		0.016 U	0.016 U	0.034 U	0.025 U	0.023 U
Methylene	2,400	0.016 U	0.016 U	0.034 U	0.025 U	0.023 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
1,1,2,2-Tetrachloroethane		0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
Tetrachloroethene	240	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
Toluene	650	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
1,1,1-Trichloroethane	1,200	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
1,1,2-Trichloroethane	1,800	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
Trichloroethene	1,300	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
Vinyl Chloride	1,200	0.016 U	0.016 U	0.034 U	0.025 U	0.023 U
m,p-Xylene	420	0.0082 U	0.0081 U	0.017 U	0.012 U	0.012 U
o-Xylene	410	0.0082 U	0.012	0.017 U	0.012 U	0.012 U
Xylenes, Total	320	NA	NA	NA	NA	NA
Subtotal:		0.4	0.5	1.1	0.6	0.5

⁽²⁾ mg/kg - milligrams per kilogram.(3) TCL - Target compound list.

⁽⁴⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

^{(5) --} Soil saturation limits not available.(6) NA - Not analyzed.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dept	th (feet below grou	nd surface)/Concer	ntration
	C_{sat}	SB01-002	SP02-002	SP03-002	SB04-001	SP05-002
Compound/Analyte	(mg/kg)	8-10	3-4	4-5	5-7	9-10
		TCL Semivo	olatiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
Bis(2-chloroethyl)ether	3,300	0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
Bis(2-ethylhexyl)phthalate	31,000	0.45	0.38 U	0.44 U	1.1	0.39 U
4-Bromophenyl phenyl ether		0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
Butyl benzyl phthalate	930	0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
Carbazole		0.38 U	0.47	0.44 U	0.41 U	0.39 U
1-Chloro-3-methylphenol		0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
1-Chloroaniline		0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
2-Chloronaphthalene		0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
2-Chlorophenol	53,000	0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
4-Chlorophenyl phenyl ether		0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
Dibenzofuran		0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
1,2-Dichlorobenzene	560	0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
1,3-Dichlorobenzene		0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
1,4-Dichlorobenzene		0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
3,3´-Dichlorobenzidine		0.76 U	0.75 U	0.89 U	0.82 U	0.78 L
2,4-Dichlorophenol		0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
Diethyl phthalate	2,000	0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
Dimethyl phthalate		0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
Di-n-butyl phthalate	2,300	0.38 U	0.38 U	0.44 U	0.45	0.39 L
2,4-Dimethylphenol		0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
1,6-Dinitro-2-methylphenol		1.8 U	1.8 U	2.1 U	2 U	1.9 U
2,4-Dinitrophenol		1.8 U	1.8 U	2.1 U	2 U	1.9 U
2,4-Dinitrotoluene		0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
2,6-Dinitrotoluene		0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
Di-n-octyl phthalate	10,000	0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
Hexachlorobenzene		0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
Hexachlorobutadiene		0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
Hexachlorocyclopentadiene	2,200	0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
Hexachloroethane		0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
sophorone	4,600	0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
2-Methylnaphthalene		0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
2-Methylphenol		0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
4-Methylphenol		0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
2-Nitroaniline		1.8 U	1.8 U	2.1 U	2 U	1.9 U
3-Nitroaniline		1.8 U	1.8 U	2.1 U	2 U	1.9 U
4-Nitroaniline	1 000	1.8 U	1.8 U	2.1 U	2 U	1.9 U
Nitrobenzene	1,000	0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
2-Nitrophenol		1.8 U	1.8 U	2.1 U	2 U	1.9 L
-Nitrophenol		1.8 U	1.8 U	2.1 U	2 U	1.9 L
N-Nitrosodi-n-propylamine		0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
N-Nitrosodiphenylamine		0.38 U	0.38 U	0.44 U	0.41 U	0.39 U
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.019 U	0.017 U	0.017 U
Pentachlorophenol		1.8 U	1.8 U	2.1 U	2 U	1.9 U
Phenol	2 200	0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
1,2,4-Trichlorobenzene	3,200	0.38 U	0.38 U	0.44 U	0.41 U	0.39 L
2,4,5-Trichlorophenol		0.76 U	0.75 U	0.89 U	0.82 U	0.78 U
2,4,6-Trichlorophenol Subtota		0.38 U 30.1	0.38 U 30.1	0.44 U 34.9	0.41 U 33.6	0.39 U 31.2

^{(1) -} Soil saturation limits not available.

 ^{(1) -} Soft satisfactors into the following analyzed for but not detected; the associated value is the sample reporting limit.
 (3) TCL - Target Compound List.
 (4) mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	C_{sat}	SB01-002	SP02-002	SP03-002	SB04-001	SP05-002
Compound/Analyte	(mg/kg)	8-10	3-4	4-5	5-7	9-10
		PAHs	(mg/kg)			
Acenaphthene		0.029 U	0.19	0.034 U	0.17	0.03 U
Acenaphthylene		0.029 U	0.13	0.034 U	0.13	0.03 U
Anthracene		0.16	0.3	0.034 U	0.7	0.03 U
Benzo(a)anthracene		0.34	0.43	0.034 U	0.78	0.03 U
Benzo(b)fluoranthene		0.32	0.36	0.034 U	1.1	0.03 U
Benzo(k)fluoranthene		0.26	0.39	0.034 U	0.91	0.03 U
Benzo(g,h,i)perylene		0.23	0.48	0.034 U	1.2	0.03 U
Benzo(a)pyrene		0.21	0.52	0.034 U	0.75	0.03 U
Chrysene		0.67	0.62	0.034 U	1.7	0.03 U
Dibenzo(a,h)anthracene		0.099	0.13	0.034 U	0.41	0.03 U
Fluoranthene		1.1	0.85	0.034 U	2.4	0.03 U
Fluorene		0.029 U	0.21	0.034 U	0.31	0.03 U
Indeno(1,2,3-cd)pyrene		0.2	0.35	0.034 U	0.74	0.03 U
Naphthalene		0.044	0.28	0.034 U	0.15	0.03 U
Phenanthrene		0.35	1	0.034 U	1.5	0.03 U
Pyrene		1.2	1.1	0.034 U	3.4	0.03 U
		PCBs	(mg/kg)		•	
Aroclor 1016		0.093 U	0.09 U	0.1 U	0.096 U	0.095 U
Aroclor 1221		0.093 U	0.09 U	0.1 U	0.096 U	0.095 U
Aroclor 1232		0.093 U	0.09 U	0.1 U	0.096 U	0.095 U
Aroclor 1242		0.093 U	0.09 U	0.1 U	5.8	0.095 U
Aroclor 1248		0.093 U	0.09 U	0.1 U	0.096 U	0.095 U
Aroclor 1254		0.19 U	0.18 U	0.2 U	3.4	0.19 U
Aroclor 1260		0.19 U	0.18 U	0.2 U	0.19 U	0.19 U
Subtotal of PCBs:	50*	0.8	0.8	0.9	9.8	0.9
Subtotal:		6.1	8.2	1.4	26.1	1.3
Total Organic Content:	2,000**	37	39	37	60	33

- (1) Soil saturation limits not available.
- $(2) \ \ U Indicates \ compound/analyte \ was \ analyzed \ for \ but \ not \ detected; \ the \ associated \ value \ is \ the \ sample \ reporting \ limit.$
- (3) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (4) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (5) PAHs Polynuclear Aromatic Hydrocarbons.
- (6) PCBs Polychlorinated Biphenyls.
- (7) mg/kg milligram per kilogram.

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	entration
	C_{sat}	SP06-002	SP06-003	SP07-002	SP07-003	SP08-002
Compound/Analyte	(mg/kg)	3-4	8-10	9-10	16-17	7-8
		TCL Vola	tiles (mg/kg)	•		•
Acetone	100,000	0.16	0.092 U	0.068 U	0.046 U	0.097
Benzene	870	0.78	0.056	0.014 U	0.0093 U	0.011 U
Bromodichloromethane	3,000	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
Bromoform	1,900	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
Bromomethane	3,200	0.05 U	0.037 U	0.027 U	0.019 U	0.022 U
2-Butanone		0.05 U	0.037 U	0.027 U	0.019 U	0.022 U
Carbon Disulfide	720	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
Carbon Tetrachloride	1,100	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
Chlorobenzene	680	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
Chloroethane		0.05 U	0.037 U	0.027 U	0.019 U	0.022 U
Chloroform	2,900	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
Chloromethane		0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
Dibromochloromethane	1,300	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
1,1-Dichloroethane	1,700	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
1,2-Dichloroethane	1,800	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
1,1-Dichloroethene	1,500	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
cis-1,2-Dichloroethene		0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
trans-1,2-Dichloroethene		0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
1,2-Dichloropropane	1,100	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
cis-1,3-Dichloropropene	1,400	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
trans-1,3-Dichloropropene	1,400	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
Ethylbenzene	400	3	0.38	0.014 U	0.0093 U	0.011 U
2-Hexanone		0.05 U	0.037 U	0.027 U	0.019 U	0.022 U
4-Methyl-2-Pentanone		0.05 U	0.037 U	0.027 U	0.019 U	0.022 U
Methylene	2,400	0.05 U	0.037 U	0.027 U	0.019 U	0.022 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
1,1,2,2-Tetrachloroethane		0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
Tetrachloroethene	240	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
Toluene	650	0.79	0.044	0.014 U	0.0093 U	0.011 U
1,1,1-Trichloroethane	1,200	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
1,1,2-Trichloroethane	1,800	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
Trichloroethene	1,300	0.025 U	0.018 U	0.014 U	0.0093 U	0.011 U
Vinyl Chloride	1,200	0.05 U	0.037 U	0.027 U	0.019 U	0.022 U
m,p-Xylene	420	3	0.098	0.014 U	0.0093 U	0.011 U
o-Xylene	410	2	0.17	0.014 U	0.0093 U	0.011 U
Xylenes, Total	320	NA	NA	NA	NA	NA
Subtotal	:[]	10.6	1.5	0.6	0.4	0.5

- NOTES:
 (1) -- Soil saturation limits not available.
- $(2) \ \ U\ \ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (3) NA Not analyzed.
- (4) TCL Target Compound List.
- (5) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dept	th (feet below grou	nd surface)/Concer	ntration
	C_{sat}	SP06-002	SP06-003	SP07-002	SP07-003	SP08-002
Compound/Analyte	(mg/kg)	3-4	8-10	9-10	16-17	7-8
•		TCL Semivo	olatiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
Bis(2-chloroethyl)ether	3,300	0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
-Bromophenyl phenyl ether		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
Butyl benzyl phthalate	930	0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
Carbazole		0.39 U	1.4	0.38 U	0.39 U	0.4 U
-Chloro-3-methylphenol		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
-Chloroaniline		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
-Chloronaphthalene		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
-Chlorophenol	53,000	0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
-Chlorophenyl phenyl ether		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
Dibenzofuran		1.3	1.6	0.38 U	0.39 U	0.4 U
,2-Dichlorobenzene	560	0.39 U	1.1 U	0.38 U	0.39 U	0.4 L
,3-Dichlorobenzene		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
,4-Dichlorobenzene		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
,3´-Dichlorobenzidine		0.78 U	2.2 U	0.76 U	0.79 U	0.8 U
2,4-Dichlorophenol		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
Diethyl phthalate	2,000	0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
Dimethyl phthalate		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
Di-n-butyl phthalate	2,300	0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
,4-Dimethylphenol		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
-,6-Dinitro-2-methylphenol		1.9 U	5.2 U	1.9 U	1.9 U	1.9 U
,4-Dinitrophenol		1.9 U	5.2 U	1.9 U	1.9 U	1.9 U
,4-Dinitrotoluene		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
,6-Dinitrotoluene		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
Di-n-octyl phthalate	10,000	0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
Hexachlorobenzene		0.39 U	1.1 U	0.38 U	0.39 U	0.4 L
Hexachlorobutadiene		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
Hexachlorocyclopentadiene	2,200	0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
Hexachloroethane		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
sophorone	4,600	0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
2-Methylnaphthalene		20	17	0.38 U	0.39 U	0.4 U
2-Methylphenol		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
-Methylphenol		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
2-Nitroaniline		1.9 U	5.2 U	1.9 U	1.9 U	1.9 U
-Nitroaniline		1.9 U	5.2 U	1.9 U	1.9 U	1.9 U
-Nitroaniline		1.9 U	5.2 U	1.9 U	1.9 U	1.9 U
Vitrobenzene	1,000	0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
-Nitrophenol		1.9 U	5.2 U	1.9 U	1.9 U	1.9 U
-Nitrophenol		1.9 U	5.2 U	1.9 U	1.9 U	1.9 U
V-Nitrosodi-n-propylamine		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
I-Nitrosodiphenylamine		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
, 2'-Oxybis(1-Chloropropane)		0.017 U	0.046 U	0.016 U	0.017 U	0.017 U
entachlorophenol		1.9 U	5.2 U	1.9 U	1.9 U	1.9 U
Phenol		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
,2,4-Trichlorobenzene	3,200	0.39 U	1.1 U	0.38 U	0.39 U	0.4 L
2,4,5-Trichlorophenol		0.78 U	2.2 U	0.76 U	0.79 U	J 8.0
,4,6-Trichlorophenol		0.39 U	1.1 U	0.38 U	0.39 U	0.4 U
Subtota	ıl:	51.7	103.4	30.8	31.2	31.6

^{(1) -} Soil saturation limits not available.

 ^{(1) -} Soft satisfactors into the following analyzed for but not detected; the associated value is the sample reporting limit.
 (3) TCL - Target Compound List.
 (4) mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	C_{sat}	SP06-002	SP06-003	SP07-002	SP07-003	SP08-002
Compound/Analyte	(mg/kg)	3-4	8-10	9-10	16-17	7-8
		PAHs	(mg/kg)			
Acenaphthene		10	4.5	0.029 U	0.03 U	0.003 U
Acenaphthylene		2	4.2	0.029 U	0.03 U	0.0052
Anthracene		9.6	4.9	0.029 U	0.03 U	0.011
Benzo(a)anthracene		3.9	4.2	0.029 U	0.03 U	0.029
Benzo(b)fluoranthene		1.1	1.3	0.029 U	0.03 U	0.035
Benzo(k)fluoranthene		0.89	1.1	0.029 U	0.03 U	0.027
Benzo(g,h,i)perylene		1.2	0.82 U	0.029 U	0.03 U	0.015
Benzo(a)pyrene		2.7	0.97	0.029 U	0.03 U	0.031
Chrysene		5.1	4.3	0.029 U	0.03 U	0.035
Dibenzo(a,h)anthracene		0.52	0.82 U	0.029 U	0.03 U	0.006
Fluoranthene		9.1	6.8	0.029 U	0.03 U	0.043
Fluorene		10	6.5	0.029 U	0.03 U	0.0052
Indeno(1,2,3-cd)pyrene		1.2	0.82 U	0.029 U	0.03 U	0.014
Naphthalene		27	13	0.029 U	0.03 U	0.004
Phenanthrene		34	21	0.029 U	0.03 U	0.032
Pyrene		15	10	0.029 U	0.03 U	0.056
		PCBs	(mg/kg)			
Aroclor 1016		0.094 U	0.09 U	0.09 U	0.096 U	0.098 U
Aroclor 1221		0.094 U	0.09 U	0.09 U	0.096 U	0.098 U
Aroclor 1232		0.094 U	0.09 U	0.09 U	0.096 U	0.098 U
Aroclor 1242		0.094 U	0.09 U	0.09 U	0.096 U	0.098 U
Aroclor 1248		0.094 U	0.09 U	0.09 U	0.096 U	0.098 U
Aroclor 1254		0.19 U	0.18 U	0.18 U	0.19 U	0.2 U
Aroclor 1260		0.19 U	0.18 U	0.18 U	0.19 U	0.2 U
Subtotal of PCBs:	50*	0.9	0.8	0.8	0.9	0.9
Subtotal:		134.2	86.0	1.3	1.3	1.2
Total Organic Content:	2,000**	197	191	33	33	33

- (1) Soil saturation limits not available.
- (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (3) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (4) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (5) PAHs Polynuclear Aromatic Hydrocarbons.
- (6) PCBs Polychlorinated Biphenyls.
- (7) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration				
	C _{sat}	SB09-001	SP10-002	SP10-003	SP11-002	SP13-002
Compound/Analyte	(mg/kg)	3-5	6-7	13-14	9-10	6-7
Compoundatinatyte	(1116/116)	Į <u></u>	tiles (mg/kg)			0.7
Acetone	100,000	0.12	0.071 U	0.053 U	0.078	0.12
Benzene	870	0.19	3.6	0.92	0.013 U	0.012 U
Bromodichloromethane	3,000	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
Bromoform	1,900	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
Bromomethane	3,200	0.022 U	0.028 U	0.021 U	0.026 U	0.023 U
2-Butanone		0.022 U	0.028 U	0.021 U	0.026 U	0.023 U
Carbon Disulfide	720	0.013	0.014 U	0.011 U	0.013 U	0.012 U
Carbon Tetrachloride	1,100	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
Chlorobenzene	680	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
Chloroethane		0.022 U	0.028 U	0.021 U	0.026 U	0.023 U
Chloroform	2,900	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
Chloromethane		0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
Dibromochloromethane	1,300	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
1,1-Dichloroethane	1,700	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
1,2-Dichloroethane	1,800	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
1,1-Dichloroethene	1,500	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
cis-1,2-Dichloroethene		0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
trans-1,2-Dichloroethene		0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
1,2-Dichloropropane	1,100	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
cis-1,3-Dichloropropene	1,400	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
trans-1,3-Dichloropropene	1,400	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
Ethylbenzene	400	0.07	8.2	9	0.013 U	0.012 U
2-Hexanone		0.022 U	0.028 U	0.021 U	0.026 U	0.023 U
4-Methyl-2-Pentanone		0.022 U	0.028 U	0.021 U	0.026 U	0.023 U
Methylene	2,400	0.022 U	0.028 U	0.021 U	0.026 U	0.023 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
1,1,2,2-Tetrachloroethane		0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
Tetrachloroethene	240	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
Toluene	650	0.011 U	0.014 U	0.6	0.013 U	0.012 U
1,1,1-Trichloroethane	1,200	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
1,1,2-Trichloroethane	1,800	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
Trichloroethene	1,300	0.011 U	0.014 U	0.011 U	0.013 U	0.012 U
Vinyl Chloride	1,200	0.022 U	0.028 U	0.021 U	0.026 U	0.023 U
m,p-Xylene	420	0.013	5	3.8	0.013 U	0.012 U
o-Xylene	410	0.087	1.4	12	0.013 U	0.012 U
Xylenes, Total	320	NA	NA	NA	NA	NA
Subtota	1:	0.9	18.8	26.8	0.6	0.6

- (1) Soil saturation limits not available.
- (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (3) NA Not analyzed.
- (4) TCL Target Compound List.
- (5) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration						
	C_{sat}	SB09-001	SP10-002	SP10-003	SP11-002	SP13-002		
Compound/Analyte	(mg/kg)	3-5	6-7	13-14	9-10	6-7		
		TCL Semivo	olatiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
Bis(2-chloroethyl)ether	3,300	0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
Bis(2-ethylhexyl)phthalate	31,000	0.75	0.39 U	0.38 U	0.38 U	0.4 U		
4-Bromophenyl phenyl ether		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
Butyl benzyl phthalate	930	0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
Carbazole		3.7	0.39 U	0.38 U	0.38 U	0.4 U		
1-Chloro-3-methylphenol		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
1-Chloroaniline		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
2-Chloronaphthalene		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
2-Chlorophenol	53,000	0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
1-Chlorophenyl phenyl ether		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
Dibenzofuran		0.65	1.2	0.75	0.38 U	0.4 U		
,2-Dichlorobenzene	560	0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
1,3-Dichlorobenzene		0.37 U	0.39 U	0.38 U	0.38 U	0.4 L		
,4-Dichlorobenzene		0.37 U	0.39 U	0.38 U	0.38 U	0.4 L		
3,3´-Dichlorobenzidine		0.75 U	0.77 U	0.77 U	0.77 U	0.8 L		
2,4-Dichlorophenol		0.37 U	0.39 U	0.38 U	0.38 U	0.4 L		
Diethyl phthalate	2,000	0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
Dimethyl phthalate		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
Di-n-butyl phthalate	2,300	0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
2,4-Dimethylphenol		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
4,6-Dinitro-2-methylphenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U		
2,4-Dinitrophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U		
2,4-Dinitrotoluene		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
2,6-Dinitrotoluene		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
Di-n-octyl phthalate	10,000	0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
Hexachlorobenzene		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
Hexachlorobutadiene		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
Hexachlorocyclopentadiene	2,200	0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
Hexachloroethane		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
sophorone	4,600	0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
2-Methylnaphthalene		0.37 U	23	20	0.42	0.53		
2-Methylphenol		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
l-Methylphenol		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
2-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U		
3-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U		
I-Nitroaniline		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U		
Vitrobenzene	1,000	0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
2-Nitrophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U		
-Nitrophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U		
N-Nitrosodi-n-propylamine		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
N-Nitrosodiphenylamine		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.016 U	0.016 U	0.017 U		
Pentachlorophenol		1.8 U	1.9 U	1.9 U	1.9 U	1.9 U		
Phenol		0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
1,2,4-Trichlorobenzene	3,200	0.37 U	0.39 U	0.38 U	0.38 U	0.4 U		
2,4,5-Trichlorophenol		0.75 U	0.77 U	0.77 U	0.77 U	0.8 U		
2,4,6-Trichlorophenol	<u> </u>	0.37 U 33.6	0.39 U	0.38 U	0.38 U 30.9	0.4 U		

^{(1) -} Soil saturation limits not available.

 ^{(1) -} Soft satisfactors into the following analyzed for but not detected; the associated value is the sample reporting limit.
 (3) TCL - Target Compound List.
 (4) mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	C_{sat}	SB09-001	SP10-002	SP10-003	SP11-002	SP13-002
Compound/Analyte	(mg/kg)	3-5	6-7	13-14	9-10	6-7
		PAHs	(mg/kg)			
Acenaphthene		0.51	8.6	5.5	0.046	0.056
Acenaphthylene		0.36	5.1	3.7	0.029 U	0.03 U
Anthracene		2.3	8.6	3.1	0.029 U	0.03 U
Benzo(a)anthracene		3.3	1.7	0.37	0.029 U	0.03 U
Benzo(b)fluoranthene		2.3	2.5	0.42	0.029 U	0.03 U
Benzo(k)fluoranthene		2.3	1.7	0.49	0.029 U	0.03 U
Benzo(g,h,i)perylene		0.74	1.6	0.51	0.029 U	0.03 U
Benzo(a)pyrene		1.6	2.2	0.45	0.029 U	0.03 U
Chrysene		3.8	11	2.2	0.032	0.03 U
Dibenzo(a,h)anthracene		0.31	0.59	0.13	0.029 U	0.03 U
Fluoranthene		5.3	6.8	1.8	0.037	0.03 U
Fluorene		0.92	6.7	3.8	0.029 U	0.03 U
Indeno(1,2,3-cd)pyrene		0.69	1.1	0.26	0.029 U	0.03 U
Naphthalene		0.52	18	27	0.73	0.99
Phenanthrene		5.2	26	9.3	0.092	0.04
Pyrene		5.1	14	3	0.063	0.03 U
		PCBs	(mg/kg)			
Aroclor 1016		0.088 U	0.094 U	0.09 U	0.094 U	0.097 U
Aroclor 1221		0.088 U	0.094 U	0.09 U	0.094 U	0.097 U
Aroclor 1232		0.088 U	0.094 U	0.09 U	0.094 U	0.097 U
Aroclor 1242		0.39	0.094 U	0.09 U	0.094 U	0.097 U
Aroclor 1248		0.088 U	0.094 U	0.09 U	0.094 U	0.097 U
Aroclor 1254		0.41	0.19 U	0.18 U	0.19 U	0.19 U
Aroclor 1260		0.18 U	0.19 U	0.18 U	0.19 U	0.19 U
Subtotal of PCBs:	50*	1.3	0.9	0.8	0.9	0.9
Subtotal:		36.6	117.0	62.8	2.1	2.3
Total Organic Content:	2,000**	71	190	140	34	35

- (1) Soil saturation limits not available.
- (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (3) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (4) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (5) PAHs Polynuclear Aromatic Hydrocarbons.
- (6) PCBs Polychlorinated Biphenyls.
- (7) mg/kg milligram per kilogram.

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	C_{sat}	SP13-003	SB14-002	SB15-002	SB15-003	SP16-002
Compound/Analyte	(mg/kg)	15-16	6-8	6-8	10-12	9-10
	<u> </u>	TCL Vola	tiles (mg/kg)			
Acetone	100,000	0.055 U	0.078	0.051 U	0.1	0.1
Benzene	870	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
Bromodichloromethane	3,000	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
Bromoform	1,900	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
Bromomethane	3,200	0.022 U	0.03 U	0.021 U	0.022 U	0.02 U
2-Butanone		0.022 U	0.03 U	0.021 U	0.022 U	0.02 U
Carbon Disulfide	720	0.011 U	0.015 U	0.018	0.011 U	0.0098 U
Carbon Tetrachloride	1,100	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
Chlorobenzene	680	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
Chloroethane		0.022 U	0.03 U	0.021 U	0.022 U	0.02 U
Chloroform	2,900	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
Chloromethane		0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
Dibromochloromethane	1,300	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
1,1-Dichloroethane	1,700	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
1,2-Dichloroethane	1,800	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
1,1-Dichloroethene	1,500	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
cis-1,2-Dichloroethene		0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
trans-1,2-Dichloroethene		0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
1,2-Dichloropropane	1,100	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
cis-1,3-Dichloropropene	1,400	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
trans-1,3-Dichloropropene	1,400	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
Ethylbenzene	400	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
2-Hexanone		0.022 U	0.03 U	0.021 U	0.022 U	0.02 U
4-Methyl-2-Pentanone		0.022 U	0.03 U	0.021 U	0.022 U	0.02 U
Methylene	2,400	0.022 U	0.03 U	0.021 U	0.022 U	0.02 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
1,1,2,2-Tetrachloroethane		0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
Tetrachloroethene	240	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
Toluene	650	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
1,1,1-Trichloroethane	1,200	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
1,1,2-Trichloroethane	1,800	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
Trichloroethene	1,300	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
Vinyl Chloride	1,200	0.022 U	0.03 U	0.021 U	0.022 U	0.02 U
m,p-Xylene	420	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
o-Xylene	410	0.011 U	0.015 U	0.01 U	0.011 U	0.0098 U
Xylenes, Total	320	NA	NA	NA	NA	NA
Subtot	al:	0.5	0.7	0.5	0.6	0.5

- NOTES:

 (1) Soil saturation limits not available.

 (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (3) NA Not analyzed.
- (4) TCL Target Compound List.
- (5) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Sample Location and Depth (feet below ground surface)/Concentration					
	C_{sat}	SP13-003	SB14-002	SB15-002	SB15-003	SP16-002		
Compound/Analyte	(mg/kg)	15-16	6-8	6-8	10-12	9-10		
		TCL Semivo	olatiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Bis(2-chloroethyl)ether	3,300	0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
4-Bromophenyl phenyl ether		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Butyl benzyl phthalate	930	0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Carbazole		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
1-Chloro-3-methylphenol		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
1-Chloroaniline		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
2-Chloronaphthalene		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
2-Chlorophenol	53,000	0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
4-Chlorophenyl phenyl ether		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Dibenzofuran		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
1,2-Dichlorobenzene	560	0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
1,3-Dichlorobenzene		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
1,4-Dichlorobenzene		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
3,3´-Dichlorobenzidine		0.78 U	0.84 U	0.78 U	0.85 U	0.77 U		
2,4-Dichlorophenol		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Diethyl phthalate	2,000	0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Dimethyl phthalate		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Di-n-butyl phthalate	2,300	0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
2,4-Dimethylphenol		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
1,6-Dinitro-2-methylphenol		1.9 U	2 U	1.9 U	2.1 U	1.9 U		
2,4-Dinitrophenol		1.9 U	2 U	1.9 U	2.1 U	1.9 U		
2,4-Dinitrotoluene		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
2,6-Dinitrotoluene		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Di-n-octyl phthalate	10,000	0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Hexachlorobenzene		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Hexachlorobutadiene		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Hexachlorocyclopentadiene	2,200	0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Hexachloroethane		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Isophorone	4,600	0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
2-Methylnaphthalene		0.79	0.42 U	0.39 U	0.42 U	0.39 U		
2-Methylphenol		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
1-Methylphenol		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
2-Nitroaniline		1.9 U	2 U	1.9 U	2.1 U	1.9 U		
3-Nitroaniline		1.9 U	2 U	1.9 U	2.1 U	1.9 U		
1-Nitroaniline		1.9 U	2 U	1.9 U	2.1 U	1.9 U		
Nitrobenzene	1,000	0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
2-Nitrophenol		1.9 U	2 U	1.9 U	2.1 U	1.9 U		
-Nitrophenol		1.9 U	2 U	1.9 U	2.1 U	1.9 U		
N-Nitrosodi-n-propylamine		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
N-Nitrosodiphenylamine		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.018 U	0.017 U	0.018 U	0.016 U		
Pentachlorophenol		1.9 U	2 U	1.9 U	2.1 U	1.9 U		
Phenol		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
1,2,4-Trichlorobenzene	3,200	0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
2,4,5-Trichlorophenol		0.78 U	0.84 U	0.78 U	0.85 U	0.77 U		
2,4,6-Trichlorophenol		0.39 U	0.42 U	0.39 U	0.42 U	0.39 U		
Subtota		31.6	33.2	31.2	34.1	31.2		

^{(1) --} Soil saturation limits not available.

⁽²⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

(3) TCL - Target Compound List.

⁽⁴⁾ mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	C_{sat}	SP13-003	SB14-002	SB15-002	SB15-003	SP16-002
Compound/Analyte	(mg/kg)	15-16	6-8	6-8	10-12	9-10
		PAHs	(mg/kg)			
Acenaphthene		0.077	0.032 U	0.03 U	0.032 U	0.029 U
Acenaphthylene		0.03 U	0.032 U	0.03 U	0.032 U	0.029 U
Anthracene		0.03 U	0.032 U	0.03 U	0.032 U	0.029 U
Benzo(a)anthracene		0.03 U	0.032 U	0.03 U	0.032 U	0.029 U
Benzo(b)fluoranthene		0.03 U	0.032 U	0.03 U	0.032 U	0.029 U
Benzo(k)fluoranthene		0.03 U	0.032 U	0.03 U	0.032 U	0.029 U
Benzo(g,h,i)perylene		0.03 U	0.032 U	0.03 U	0.032 U	0.029 U
Benzo(a)pyrene		0.03 U	0.032 U	0.03 U	0.032 U	0.029 U
Chrysene		0.03 U	0.032 U	0.03 U	0.032 U	0.029 U
Dibenzo(a,h)anthracene		0.03 U	0.032 U	0.03 U	0.032 U	0.029 U
Fluoranthene		0.03 U	0.035	0.087	0.032 U	0.029 U
Fluorene		0.036	0.032 U	0.03 U	0.032 U	0.029 U
Indeno(1,2,3-cd)pyrene		0.03 U	0.032 U	0.03 U	0.032 U	0.029 U
Naphthalene		1.1	0.11	0.051	0.032 U	0.029 U
Phenanthrene		0.063	0.071	0.083	0.032 U	0.029 U
Pyrene		0.03 U	0.056	0.13	0.032 U	0.029 U
		PCBs	(mg/kg)			
Aroclor 1016		0.093 U	0.1 U	0.096 U	0.1 U	0.094 U
Aroclor 1221		0.093 U	0.1 U	0.096 U	0.1 U	0.094 U
Aroclor 1232		0.093 U	0.1 U	0.096 U	0.1 U	0.094 U
Aroclor 1242		0.093 U	0.1 U	0.096 U	0.1 U	0.094 U
Aroclor 1248		0.093 U	0.1 U	0.096 U	0.1 U	0.094 U
Aroclor 1254		0.19 U	0.2 U	0.19 U	0.21 U	0.19 U
Aroclor 1260		0.19 U	0.2 U	0.19 U	0.21 U	0.19 U
Subtotal of PCBs:	50*	0.8	0.9	0.9	0.9	0.9
Subtotal:		2.5	1.6	1.6	1.4	1.3
Total Organic Content:	2,000**	35	35	33	36	33

- (1) Soil saturation limits not available.
- (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (3) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (4) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (5) PAHs Polynuclear Aromatic Hydrocarbons.
- (6) PCBs Polychlorinated Biphenyls.
- (7) mg/kg milligram per kilogram.

		Sample	Location and Dep	th (feet below grou	und surface)/Conce	ntration
	C_{sat}	SP16-003	SB18B-002	SB21-002	SB22-002	SB23-003
Compound/Analyte	(mg/kg)	15-16	5-7	5-7	8-10	14-16
	·	TCL Vola	tiles (mg/kg)			
Acetone	100,000	0.062 U	1.9 EJ	0.05 U	0.065	3.6 U
Benzene	870	0.012 U	12 J	0.5 EJ	0.0089 U	620
Bromodichloromethane	3,000	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
Bromoform	1,900	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
Bromomethane	3,200	0.025 U	0.06 UJ	0.02 U	0.018 U	1.4 U
2-Butanone		0.025 U	0.57 J	0.02 U	0.018 U	1.4 U
Carbon Disulfide	720	0.012 U	27 J	0.01 U	0.0089 U	0.71 U
Carbon Tetrachloride	1,100	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
Chlorobenzene	680	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
Chloroethane		0.025 U	0.06 UJ	0.02 U	0.018 U	1.4 U
Chloroform	2,900	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
Chloromethane		0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
Dibromochloromethane	1,300	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
1,1-Dichloroethane	1,700	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
1,2-Dichloroethane	1,800	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
1,1-Dichloroethene	1,500	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
cis-1,2-Dichloroethene		0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
trans-1,2-Dichloroethene		0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
1,2-Dichloropropane	1,100	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
cis-1,3-Dichloropropene	1,400	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
trans-1,3-Dichloropropene	1,400	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
Ethylbenzene	400	0.012 U	8.1 J	0.83 EJ	0.0089 U	150
2-Hexanone		0.025 U	0.06 UJ	0.02 U	0.018 U	1.4 U
4-Methyl-2-Pentanone		0.025 U	0.06 UJ	0.02 U	0.018 U	1.4 U
Methylene	2,400	0.025 U	0.06 UJ	0.02 U	0.018 U	1.4 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.012 U	0.03 UJ	0.15 J	0.0089 U	64
1,1,2,2-Tetrachloroethane		0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
Tetrachloroethene	240	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
Toluene	650	0.012 U	15 J	1 EJ	0.0089 U	650
1,1,1-Trichloroethane	1,200	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
1,1,2-Trichloroethane	1,800	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
Trichloroethene	1,300	0.012 U	0.03 UJ	0.01 U	0.0089 U	0.71 U
Vinyl Chloride	1,200	0.025 U	0.06 UJ	0.02 U	0.018 U	1.4 U
m,p-Xylene	420	0.012 U	26 J	0.84 EJ	0.0089 U	310
o-Xylene	410	0.012 U	15 J	0.46 EJ	0.0089 U	150
Xylenes, Total	320	NA	NA	NA	NA	NA
Subtot	al:	0.6	106.6	4.2	0.4	1,972.3

- (1) -- Soil saturation limits not available.
- $(2) \ \ U\ \ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (3) J Indicates an estimated value.
- (4) E Value above quantitation range.
- (5) NA Not analyzed.(6) TCL Target Compound List.
- (7) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Depth (feet below ground surface)/Concentration				
	C_{sat}	SP16-003	SB18B-002	SB21-002	SB22-002	SB23-003	
Compound/Analyte	(mg/kg)	15-16	5-7	5-7	8-10	14-16	
•		TCL Semive	olatiles (mg/kg)				
Bis(2-chloroethoxy)methane		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Bis(2-chloroethyl)ether	3,300	0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	4.7 U	0.39 U	0.39 U	14 U	
4-Bromophenyl phenyl ether		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Butyl benzyl phthalate	930	0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Carbazole		0.39 U	4.7 U	2	0.39 U	460	
4-Chloro-3-methylphenol		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
4-Chloroaniline		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
2-Chloronaphthalene		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
2-Chlorophenol	53,000	0.39 U	4.7 U	0.39 U	0.39 U	14 U	
4-Chlorophenyl phenyl ether		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Dibenzofuran		0.39 U	41 J	12	0.39 U	300	
1,2-Dichlorobenzene	560	0.39 U	4.7 U	0.39 U	0.39 U	14 U	
1,3-Dichlorobenzene		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
1,4-Dichlorobenzene		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
3,3´-Dichlorobenzidine		0.77 U	9.4 U	0.79 U	0.78 U	28 U	
2,4-Dichlorophenol		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Diethyl phthalate	2,000	0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Dimethyl phthalate		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Di-n-butyl phthalate	2,300	0.39 U	4.7 U	0.39 U	0.39 U	14 U	
2,4-Dimethylphenol		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
4,6-Dinitro-2-methylphenol		1.9 U	23 U	1.9 U	1.9 U	69 U	
2,4-Dinitrophenol		1.9 U	23 U	1.9 U	1.9 U	69 U	
2,4-Dinitrotoluene		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
2,6-Dinitrotoluene		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Di-n-octyl phthalate	10,000	0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Hexachlorobenzene		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Hexachlorobutadiene		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Hexachlorocyclopentadiene	2,200	0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Hexachloroethane		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Isophorone	4,600	0.39 U	4.7 U	0.39 U	0.39 U	14 U	
2-Methylnaphthalene		0.39 U	5400 J	280	0.39 U	9700	
2-Methylphenol		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
4-Methylphenol		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
2-Nitroaniline		1.9 U	23 U	1.9 U	1.9 U	69 U	
3-Nitroaniline		1.9 U	23 U	1.9 U	1.9 U	69 U	
4-Nitroaniline		1.9 U	23 U	1.9 U	1.9 U	69 U	
Nitrobenzene	1,000	0.39 U	4.7 U	0.39 U	0.39 U	14 U	
2-Nitrophenol		1.9 U	23 U	1.9 U	1.9 U	69 U	
4-Nitrophenol		1.9 U	23 U	1.9 U	1.9 U	69 U	
N-Nitrosodi-n-propylamine		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
N-Nitrosodiphenylamine		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.2 U	0.39 U	0.39 U	0.6 U	
Pentachlorophenol		1.9 U	23 U	1.9 U	1.9 U	69 U	
Phenol		0.39 U	4.7 U	0.49	0.39 U	14 U	
1,2,4-Trichlorobenzene	3,200	0.39 U	4.7 U	0.39 U	0.39 U	14 U	
2,4,5-Trichlorophenol		0.77 U	9.4 U	0.79 U	0.78 U	28 U	
2,4,6-Trichlorophenol		0.39 U	4.7 U	0.39 U	0.39 U	14 U	
Subtota	ıl:	31.2	5,808.5	324.5	31.6	11,544.6	

^{(1) --} Soil saturation limits not available.

^{(1) —} Soil satisfactor limits for available.

(2) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

(3) J - Indicates estimated value.

⁽⁴⁾ TCL - Target Compound List.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	C_{sat}	SP16-003	SB18B-002	SB21-002	SB22-002	SB23-003
Compound/Analyte	(mg/kg)	15-16	5-7	5-7	8-10	14-16
		PAHs	(mg/kg)			
Acenaphthene		0.029 U	99 J	11	0.031	310
Acenaphthylene		0.029 U	100 J	10	0.029 U	2000
Anthracene		0.029 U	75 J	13	0.047	1000
Benzo(a)anthracene		0.029 U	14 J	4.4	0.029 U	810
Benzo(b)fluoranthene		0.029 U	14 J	3.5	0.029 U	110 U
Benzo(k)fluoranthene		0.029 U	12 J	3.9	0.029 U	230
Benzo(g,h,i)perylene		0.029 U	8.8 J	2.4	0.029 U	340
Benzo(a)pyrene		0.029 U	9.9 J	4.3	0.029 U	470
Chrysene		0.029 U	130 J	15	0.04	770
Dibenzo(a,h)anthracene		0.029 U	7.1 J	1.1	0.029 U	130
Fluoranthene		0.029 U	61 J	18	0.029 U	610
Fluorene		0.029 U	160 J	27	0.033	1500
Indeno(1,2,3-cd)pyrene		0.029 U	7.1 J	1.7	0.029 U	300
Naphthalene		0.029 U	4700 J	200	0.2	12000
Phenanthrene		0.029 U	360 J	77	0.13	3900
Pyrene		0.029 U	110 J	29	0.029 U	740
		PCBs	(mg/kg)			
Aroclor 1016		0.095 U	0.12 U	0.095 U	0.094 U	0.35 U
Aroclor 1221		0.095 U	0.12 U	0.095 U	0.094 U	0.35 U
Aroclor 1232		0.095 U	0.12 U	0.095 U	0.094 U	0.35 U
Aroclor 1242		0.095 U	0.12 U	0.28	0.094 U	0.35 U
Aroclor 1248		0.095 U	0.12 U	0.095 U	0.094 U	0.35 U
Aroclor 1254		0.19 U	0.23 U	0.19 U	0.19 U	0.69 U
Aroclor 1260		0.19 U	0.23 U	0.19 U	0.19 U	0.69 U
Subtotal of PCBs:	50*	0.9	1.1	1.0	0.9	3.1
Subtotal:		1.3	5,869.0	422.3	1.6	25,223.1
Total Organic Content:	2,000**	33	11,784	751	34	38,740

- (1) Soil saturation limits not available.
- (2) Shaded values exceed the soil attenuation capacity, or the allowable concentration of PCBs in soil (50 mg/kg)..
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) J Indicates an estimated value.
- (5) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (6) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (7) PAHs Polynuclear Aromatic Hydrocarbons.
- (8) PCBs Polychlorinated Biphenyls.
- (9) mg/kg milligram per kilogram.

		Sample	Location and Dep	th (feet below grou	ınd surface)/Conce	entration
	C_{sat}	SB24-002	SB25-002	SB25-003	SB26-001	SB27-001
Compound/Analyte	(mg/kg)	5-7	3-5	12-14	3-5	5-7
	(88)	TCL Vola	tiles (mg/kg)			
Acetone	100,000	4.1 U	0.11	0.058 U	0.09 J	0.046
Benzene	870	61	0.22	0.012 U	50 J	0.0084 U
Bromodichloromethane	3,000	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
Bromoform	1,900	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
Bromomethane	3,200	1.7 U	0.034 U	0.023 U	0.035 U	0.017 U
2-Butanone		1.7 U	0.034 U	0.023 U	0.043 J	0.017 U
Carbon Disulfide	720	0.83 U	0.017 U	0.012 U	0.036 J	0.0084 U
Carbon Tetrachloride	1,100	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
Chlorobenzene	680	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
Chloroethane		1.7 U	0.034 U	0.023 U	0.035 U	0.017 U
Chloroform	2,900	0.83 U	0.017 U	0.012 U	0.023 J	0.0084 U
Chloromethane		0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
Dibromochloromethane	1,300	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
1,1-Dichloroethane	1,700	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
1,2-Dichloroethane	1,800	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
1,1-Dichloroethene	1,500	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
cis-1,2-Dichloroethene		0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
trans-1,2-Dichloroethene		0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
1,2-Dichloropropane	1,100	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
cis-1,3-Dichloropropene	1,400	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
trans-1,3-Dichloropropene	1,400	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
Ethylbenzene	400	120	4.6	0.012 U	240 J	0.0084 U
2-Hexanone		1.7 U	0.034 U	0.023 U	0.035 U	0.017 U
4-Methyl-2-Pentanone		1.7 U	0.034 U	0.023 U	0.035 U	0.017 U
Methylene	2,400	1.7 U	0.034 U	0.023 U	0.035 U	0.017 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
1,1,2,2-Tetrachloroethane		0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
Tetrachloroethene	240	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
Toluene	650	5.2	0.54	0.012 U	180 J	0.0084 U
1,1,1-Trichloroethane	1,200	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
1,1,2-Trichloroethane	1,800	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
Trichloroethene	1,300	0.83 U	0.017 U	0.012 U	0.017 U	0.0084 U
Vinyl Chloride	1,200	1.7 U	0.034 U	0.023 U	0.035 U	0.017 U
m,p-Xylene	420	98	6.7	0.012 U	340 J	0.0084 U
o-Xylene	410	55	6.8	0.012 U	190 J	0.0084 U
Xylenes, Total	320	NA	NA	NA	NA	NA
Subtotal		373.5	19.6	0.5	1,000.7	0.4

- (1) -- Soil saturation limits not available.
- $(2) \ \ U\ \ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (3) J Indicates an estimated value.

- (4) NA Not analyzed.(5) TCL Target Compound List.(6) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dept	th (feet below grou	ind surface)/Concer	ntration
	C_{sat}	SB24-002	SB25-002	SB25-003	SB26-001	SB27-001
Compound/Analyte	(mg/kg)	5-7	3-5	12-14	3-5	5-7
		TCL Semivo	latiles (mg/kg)	·	<u> </u>	
Bis(2-chloroethoxy)methane		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Bis(2-chloroethyl)ether	3,300	0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Bis(2-ethylhexyl)phthalate	31,000	0.41 U	1.2	0.42	2.1 U	0.38 U
4-Bromophenyl phenyl ether		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Butyl benzyl phthalate	930	0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Carbazole		30	5.7	0.4 U	25	0.38 U
4-Chloro-3-methylphenol		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
4-Chloroaniline		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
2-Chloronaphthalene		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
2-Chlorophenol	53,000	0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
4-Chlorophenyl phenyl ether		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Dibenzofuran		19	4.7	0.4 U	49	0.38 U
1,2-Dichlorobenzene	560	0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
1,3-Dichlorobenzene		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
1,4-Dichlorobenzene		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
3,3´-Dichlorobenzidine		0.82 U	0.81 U	0.8 U	4.2 U	0.76 U
2,4-Dichlorophenol		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Diethyl phthalate	2,000	0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Dimethyl phthalate		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Di-n-butyl phthalate	2,300	0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
2,4-Dimethylphenol		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
4,6-Dinitro-2-methylphenol		2 U	2 U	1.9 U	10 U	1.8 U
2,4-Dinitrophenol		2 U	2 U	1.9 U	10 U	1.8 U
2,4-Dinitrotoluene		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
2,6-Dinitrotoluene		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Di-n-octyl phthalate	10,000	0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Hexachlorobenzene		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Hexachlorobutadiene		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Hexachlorocyclopentadiene	2,200	0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Hexachloroethane		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Isophorone	4,600	0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
2-Methylnaphthalene		530	58	0.4	680	0.38 U
2-Methylphenol		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
4-Methylphenol		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
2-Nitroaniline		2 U	2 U	1.9 U	10 U	1.8 U
3-Nitroaniline		2 U	2 U	1.9 U	10 U	1.8 U
4-Nitroaniline		2 U	2 U	1.9 U	10 U	1.8 U
Nitrobenzene	1,000	0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
2-Nitrophenol		2 U	2 U	1.9 U	10 U	1.8 U
4-Nitrophenol		2 U	2 U	1.9 U	10 U	1.8 U
N-Nitrosodi-n-propylamine		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
N-Nitrosodiphenylamine		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.017 U	0.017 U	0.09 U	0.38 U
Pentachlorophenol		2 U	2 U	1.9 U	10 U	1.8 U
Phenol		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
1,2,4-Trichlorobenzene	3,200	0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
2,4,5-Trichlorophenol		0.82 U	0.81 U	0.8 U	4.2 U	0.76 U
2,4,6-Trichlorophenol		0.41 U	0.41 U	0.4 U	2.1 U	0.38 U
Subtotal		610.6	100.8	31.6	913.9	30.4

^{(1) --} Soil saturation limits not available.

⁽²⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

(3) TCL - Target Compound List.

⁽⁴⁾ mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	C_{sat}	SB24-002	SB25-002	SB25-003	SB26-001	SB27-001
Compound/Analyte	(mg/kg)	5-7	3-5	12-14	3-5	5-7
		PAHs	(mg/kg)			
Acenaphthene		52	19	0.03 U	86	0.029 U
Acenaphthylene		40	8.9	0.03 U	49	0.029 U
Anthracene		41	16	0.03 U	120	0.029 U
Benzo(a)anthracene		32	14	0.03 U	16	0.029 U
Benzo(b)fluoranthene		15	7	0.03 U	16 U	0.029 U
Benzo(k)fluoranthene		12	7	0.03 U	19	0.029 U
Benzo(g,h,i)perylene		4.8	3.7	0.03 U	17	0.029 U
Benzo(a)pyrene		18	9.2	0.03 U	19	0.029 U
Chrysene		31	15	0.03 U	53	0.029 U
Dibenzo(a,h)anthracene		0.4	0.94	0.03 U	6.9	0.029 U
Fluoranthene		37	20	0.03 U	110	0.029 U
Fluorene		71	26	0.067	95	0.029 U
Indeno(1,2,3-cd)pyrene		4.3	3.1 U	0.03 U	13	0.029 U
Naphthalene		380	28	0.6	190	0.029 U
Phenanthrene		190	62	0.15	270	0.031
Pyrene		91	32	0.03 U	140	0.029 U
		PCBs	(mg/kg)			
Aroclor 1016		0.1 U	0.098 U	0.096 U	0.1 U	0.094 U
Aroclor 1221		0.1 U	0.098 U	0.096 U	0.1 U	0.094 U
Aroclor 1232		0.1 U	0.098 U	0.096 U	0.1 U	0.094 U
Aroclor 1242		0.1 U	0.098 U	0.096 U	2.9	0.094 U
Aroclor 1248		0.1 U	0.098 U	0.096 U	0.1 U	0.094 U
Aroclor 1254		0.2 U	0.2 U	0.19 U	2	0.19 U
Aroclor 1260		0.2 U	0.2 U	0.19 U	0.2 U	0.19 U
Subtotal of PCBs:	50*	0.9	0.9	0.9	5.5	0.9
Subtotal:		1,020.4	272.7	2.1	1,225.4	1.3
Total Organic Content:	2,000**	2,004	393	34	3,140	32

- (1) Soil saturation limits not available.
- (2) Shaded values exceed the soil attenuation capacity, or the allowable concentration of PCBs in soil (50 mg/kg).
- (3) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (4) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (5) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (6) PAHs Polynuclear Aromatic Hydrocarbons.
- (7) PCBs Polychlorinated Biphenyls.
- (8) mg/kg milligram per kilogram.

		Sample	Location and Dep	th (feet below grou	ınd surface)/Conce	entration
	C_{sat}	SB27-002	SB28-002	SB29-001	SB29-002	SB31-002
Compound/Analyte	(mg/kg)	10-12	5-7	3-5	12-14	6-8
		TCL Vola	tiles (mg/kg)			
Acetone	100,000	0.035 U	0.048	0.055 U	0.067 U	0.064 U
Benzene	870	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
Bromodichloromethane	3,000	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
Bromoform	1,900	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
Bromomethane	3,200	0.014 U	0.015 U	0.022 U	0.027 U	0.026 U
2-Butanone		0.014 U	0.015 U	0.022 U	0.027 U	0.026 U
Carbon Disulfide	720	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
Carbon Tetrachloride	1,100	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
Chlorobenzene	680	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
Chloroethane		0.014 U	0.015 U	0.022 U	0.027 U	0.026 U
Chloroform	2,900	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
Chloromethane		0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
Dibromochloromethane	1,300	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
1,1-Dichloroethane	1,700	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
1,2-Dichloroethane	1,800	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
1,1-Dichloroethene	1,500	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
cis-1,2-Dichloroethene		0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
trans-1,2-Dichloroethene		0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
1,2-Dichloropropane	1,100	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
cis-1,3-Dichloropropene	1,400	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
trans-1,3-Dichloropropene	1,400	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
Ethylbenzene	400	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
2-Hexanone		0.014 U	0.015 U	0.022 U	0.027 U	0.026 U
4-Methyl-2-Pentanone		0.014 U	0.015 U	0.022 U	0.027 U	0.026 U
Methylene	2,400	0.014 U	0.015 U	0.022 U	0.027 U	0.026 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
1,1,2,2-Tetrachloroethane		0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
Tetrachloroethene	240	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
Toluene	650	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
1,1,1-Trichloroethane	1,200	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
1,1,2-Trichloroethane	1,800	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
Trichloroethene	1,300	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
Vinyl Chloride	1,200	0.014 U	0.015 U	0.022 U	0.027 U	0.026 U
m,p-Xylene	420	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
o-Xylene	410	0.0069 U	0.0076 U	0.011 U	0.013 U	0.013 U
Xylenes, Total	320	NA	NA	NA	NA	NA
Subtotal:		0.3	0.4	0.5	0.6	0.6

- NOTES:
 (1) -- Soil saturation limits not available.
- $(2) \ \ U\ \ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (3) NA Not analyzed.
- (4) TCL Target Compound List.
- (5) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dept	th (feet below grou	nd surface)/Concer	ntration
	C_{sat}	SB27-002	SB28-002	SB29-001	SB29-002	SB31-002
Compound/Analyte	(mg/kg)	10-12	5-7	3-5	12-14	6-8
		TCL Semivo	olatiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
Bis(2-chloroethyl)ether	3,300	0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
Bis(2-ethylhexyl)phthalate	31,000	0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
4-Bromophenyl phenyl ether		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
Butyl benzyl phthalate	930	0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
Carbazole		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
4-Chloro-3-methylphenol		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
4-Chloroaniline		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
2-Chloronaphthalene		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
2-Chlorophenol	53,000	0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
4-Chlorophenyl phenyl ether		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
Dibenzofuran		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
1,2-Dichlorobenzene	560	0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
,3-Dichlorobenzene		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
1,4-Dichlorobenzene		0.38 U	0.4 U	0.39 U	0.39 U	0.37 L
3,3´-Dichlorobenzidine		0.76 U	0.79 U	0.78 U	0.78 U	0.74 L
2,4-Dichlorophenol		0.38 U	0.4 U	0.39 U	0.39 U	0.37 L
Diethyl phthalate	2,000	0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
Dimethyl phthalate		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
Di-n-butyl phthalate	2,300	0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
2,4-Dimethylphenol		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
4,6-Dinitro-2-methylphenol		1.9 U	1.9 U	1.9 U	1.9 U	1.8 U
2,4-Dinitrophenol		1.9 U	1.9 U	1.9 U	1.9 U	1.8 U
2,4-Dinitrotoluene		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
2,6-Dinitrotoluene		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
Di-n-octyl phthalate	10,000	0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
Hexachlorobenzene		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
Hexachlorobutadiene		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
Hexachlorocyclopentadiene	2,200	0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
Hexachloroethane		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
sophorone	4,600	0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
2-Methylnaphthalene		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
2-Methylphenol		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
I-Methylphenol		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
2-Nitroaniline		1.9 U	1.9 U	1.9 U	1.9 U	1.8 U
3-Nitroaniline		1.9 U	1.9 U	1.9 U	1.9 U	1.8 U
4-Nitroaniline		1.9 U	1.9 U	1.9 U	1.9 U	1.8 U
Vitrobenzene	1,000	0.38 U	0.4 U	0.39 U	0.39 U	0.37 L
2-Nitrophenol		1.9 U	1.9 U	1.9 U	1.9 U	1.8 U
4-Nitrophenol		1.9 U	1.9 U	1.9 U	1.9 U	1.8 U
N-Nitrosodi-n-propylamine		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
N-Nitrosodiphenylamine		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
2, 2'-Oxybis(1-Chloropropane)		0.38 U	0.4 U	0.39 U	0.39 U	0.016 U
Pentachlorophenol		1.9 U	1.9 U	1.9 U	1.9 U	1.8 U
Phenol		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
1,2,4-Trichlorobenzene	3,200	0.38 U	0.4 U	0.39 U	0.39 U	0.37 U
2,4,5-Trichlorophenol		0.76 U	0.79 U	0.78 U	0.78 U	0.74 U
2,4,6-Trichlorophenol		0.38 U	0.4 U	0.39 U	0.39 U	0.37 U

 ^{(1) -} Soft satisfactors into the following analyzed for but not detected; the associated value is the sample reporting limit.
 (3) TCL - Target Compound List.
 (4) mg/kg - milligram per kilogram.

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	C_{sat}	SB27-002	SB28-002	SB29-001	SB29-002	SB31-002
Compound/Analyte	(mg/kg)	10-12	5-7	3-5	12-14	6-8
		PAHs	(mg/kg)			
Acenaphthene		0.029 U	0.03 U	0.035	0.029 U	0.028 U
Acenaphthylene		0.029 U	0.03 U	0.029 U	0.029 U	0.029
Anthracene		0.029 U	0.03 U	0.038	0.029 U	0.047
Benzo(a)anthracene		0.029 U	0.03 U	0.029 U	0.029 U	0.028 U
Benzo(b)fluoranthene		0.029 U	0.03 U	0.029 U	0.029 U	0.028 U
Benzo(k)fluoranthene		0.029 U	0.03 U	0.029 U	0.029 U	0.028 U
Benzo(g,h,i)perylene		0.029 U	0.03 U	0.029 U	0.029 U	0.028 U
Benzo(a)pyrene		0.029 U	0.03 U	0.029 U	0.029 U	0.028 U
Chrysene		0.029 U	0.03 U	0.052	0.029 U	0.075
Dibenzo(a,h)anthracene		0.029 U	0.03 U	0.029 U	0.029 U	0.028 U
Fluoranthene		0.029 U	0.03 U	0.029	0.029 U	0.075
Fluorene		0.029 U	0.03 U	0.033	0.029 U	0.03
Indeno(1,2,3-cd)pyrene		0.029 U	0.03 U	0.029 U	0.029 U	0.028 U
Naphthalene		0.029 U	0.03 U	0.094	0.029 U	0.11
Phenanthrene		0.047	0.03 U	0.14	0.036	0.17
Pyrene		0.029 U	0.03 U	0.044	0.029 U	0.13
		PCBs	(mg/kg)			
Aroclor 1016		0.093 U	0.096 U	0.094 U	0.095 U	0.093 U
Aroclor 1221		0.093 U	0.096 U	0.094 U	0.095 U	0.093 U
Aroclor 1232		0.093 U	0.096 U	0.094 U	0.095 U	0.093 U
Aroclor 1242		0.093 U	0.14	0.094 U	0.095 U	0.093 U
Aroclor 1248		0.093 U	0.096 U	0.094 U	0.095 U	0.093 U
Aroclor 1254		0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor 1260		0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Subtotal of PCBs:	50*	0.8	0.9	0.9	0.9	0.8
Subtotal:		1.3	1.4	1.5	1.3	1.7
Total Organic Content:	2,000**	33	34	34	34	32

- (1) -- Soil saturation limits not available.
- (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (3) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (4) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (5) PAHs Polynuclear Aromatic Hydrocarbons.
- (6) PCBs Polychlorinated Biphenyls.
- (7) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	ınd surface)/Conce	entration
	C_{sat}	SB32-002	SB33-002	SB33-003	SP34-002	SP35-002
Compound/Analyte	(mg/kg)	3-5	5-7	10-12	5-7	6-7
		TCL Vola	tiles (mg/kg)			
Acetone	100,000	0.081 U	0.12	0.064 U	0.14	0.13
Benzene	870	0.77	0.012 U	0.013 U	0.012 U	0.012 U
Bromodichloromethane	3,000	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
Bromoform	1,900	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
Bromomethane	3,200	0.033 U	0.024 U	0.026 U	0.024 U	0.023 U
2-Butanone		0.033 U	0.027	0.026 U	0.024 U	0.027
Carbon Disulfide	720	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
Carbon Tetrachloride	1,100	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
Chlorobenzene	680	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
Chloroethane		0.033 U	0.024 U	0.026 U	0.024 U	0.023 U
Chloroform	2,900	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
Chloromethane		0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
Dibromochloromethane	1,300	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
1,1-Dichloroethane	1,700	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
1,2-Dichloroethane	1,800	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
1,1-Dichloroethene	1,500	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
cis-1,2-Dichloroethene		0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
trans-1,2-Dichloroethene		0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
1,2-Dichloropropane	1,100	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
cis-1,3-Dichloropropene	1,400	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
trans-1,3-Dichloropropene	1,400	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
Ethylbenzene	400	2	0.012 U	0.013 U	0.012 U	0.012 U
2-Hexanone		0.033 U	0.024 U	0.026 U	0.024 U	0.023 U
4-Methyl-2-Pentanone		0.033 U	0.024 U	0.026 U	0.024 U	0.023 U
Methylene	2,400	0.033 U	0.024 U	0.026 U	0.024 U	0.023 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
1,1,2,2-Tetrachloroethane		0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
Tetrachloroethene	240	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
Toluene	650	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
1,1,1-Trichloroethane	1,200	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
1,1,2-Trichloroethane	1,800	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
Trichloroethene	1,300	0.016 U	0.012 U	0.013 U	0.012 U	0.012 U
Vinyl Chloride	1,200	0.033 U	0.024 U	0.026 U	0.024 U	0.023 U
m,p-Xylene	420	0.057	0.012 U	0.013 U	0.012 U	0.012 U
o-Xylene	410	0.034	0.025	0.013 U	0.012 U	0.012 U
Xylenes, Total	320	NA	NA	NA	NA	NA
Subtotal	: []	3.5	0.6	0.6	0.6	0.6

- (1) -- Soil saturation limits not available.
- (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (3) NA Not analyzed.
- (4) TCL Target Compound List.
- (5) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration						
	C_{sat}	SB32-002	SB33-002	SB33-003	SP34-002	SP35-002		
Compound/Analyte	(mg/kg)	3-5	5-7	10-12	5-7	6-7		
		TCL Semivo	olatiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
Bis(2-chloroethyl)ether	3,300	0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
Bis(2-ethylhexyl)phthalate	31,000	0.87	0.4 U	0.39 U	0.4 U	0.39 U		
4-Bromophenyl phenyl ether		0.39 U	0.4 U	0.39 U	0.4 U	0.39 L		
Butyl benzyl phthalate	930	0.39 U	0.4 U	0.39 U	0.4 U	0.39 L		
Carbazole		1.3	0.4 U	0.39 U	0.4 U	0.39 L		
I-Chloro-3-methylphenol		0.39 U	0.4 U	0.39 U	0.4 U	0.39 L		
4-Chloroaniline		0.39 U	0.4 U	0.39 U	0.4 U	0.39 L		
2-Chloronaphthalene		0.39 U	0.4 U	0.39 U	0.4 U	0.39 L		
2-Chlorophenol	53,000	0.39 U	0.4 U	0.39 U	0.4 U	0.39 L		
I-Chlorophenyl phenyl ether		0.39 U	0.4 U	0.39 U	0.4 U	0.39 L		
Dibenzofuran		0.39 U	0.4 U	0.39 U	0.4 U	0.39 L		
,2-Dichlorobenzene	560	0.39 U	0.4 U	0.39 U	0.4 U	0.39 L		
,3-Dichlorobenzene		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
,4-Dichlorobenzene		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
3,3'-Dichlorobenzidine		0.78 U	0.81 U	0.79 U	0.8 U	0.79 U		
2,4-Dichlorophenol		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
Diethyl phthalate	2,000	0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
Dimethyl phthalate		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
Di-n-butyl phthalate	2,300	0.39 U	0.4 U	0.39 U	0.4 U	0.39 L		
2,4-Dimethylphenol		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
,6-Dinitro-2-methylphenol		1.9 U	2 U	1.9 U	1.9 U	1.9 U		
2,4-Dinitrophenol		1.9 U	2 U	1.9 U	1.9 U	1.9 U		
2,4-Dinitrotoluene		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
2,6-Dinitrotoluene		0.39 U	0.4 U	0.39 U	0.4 U	0.39 L		
Di-n-octyl phthalate	10,000	0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
Hexachlorobenzene		0.39 U	0.4 U	0.39 U	0.4 U	0.39 L		
Hexachlorobutadiene		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
Hexachlorocyclopentadiene	2,200	0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
Hexachloroethane		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
sophorone	4,600	0.39 U	0.4 U	0.39 U	0.4 U	0.39 L		
2-Methylnaphthalene		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
2-Methylphenol		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
4-Methylphenol		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
2-Nitroaniline		1.9 U	2 U	1.9 U	1.9 U	1.9 U		
3-Nitroaniline		1.9 U	2 U	1.9 U	1.9 U	1.9 U		
1-Nitroaniline		1.9 U	2 U	1.9 U	1.9 U	1.9 U		
Vitrobenzene	1,000	0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
2-Nitrophenol		1.9 U	2 U	1.9 U	1.9 U	1.9 U		
-Nitrophenol		1.9 U	2 U	1.9 U	1.9 U	1.9 U		
N-Nitrosodi-n-propylamine		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
N-Nitrosodiphenylamine		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
., 2'-Oxybis(1-Chloropropane)		0.017 U	0.017 U	0.017 U	0.017 U	0.017 U		
Pentachlorophenol		1.9 U	2 U	1.9 U	1.9 U	1.9 U		
Phenol		0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
1,2,4-Trichlorobenzene	3,200	0.39 U	0.4 U	0.39 U	0.4 U	0.39 U		
2,4,5-Trichlorophenol		0.78 U	0.81 U	0.79 U	0.8 U	0.79 U		
2,4,6-Trichlorophenol		0.39 U 32.6	0.4 U 32.4	0.39 U 31.2	0.4 U 31.6	0.39 U 31.2		

^{(1) -} Soil saturation limits not available.

 ^{(1) -} Soft satisfactors into the following analyzed for but not detected; the associated value is the sample reporting limit.
 (3) TCL - Target Compound List.
 (4) mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	C_{sat}	SB32-002	SB33-002	SB33-003	SP34-002	SP35-002
Compound/Analyte	(mg/kg)	3-5	5-7	10-12	5-7	6-7
		PAHs	(mg/kg)			
Acenaphthene		0.84	0.031 U	0.03 U	0.12	0.03 U
Acenaphthylene		0.99	0.031 U	0.03 U	0.086	0.03 U
Anthracene		0.98	0.031 U	0.03 U	0.17	0.03 U
Benzo(a)anthracene		1.8	0.031 U	0.03 U	0.094	0.064
Benzo(b)fluoranthene		0.87	0.031 U	0.03 U	0.13	0.041
Benzo(k)fluoranthene		0.75	0.031 U	0.03 U	0.14	0.056
Benzo(g,h,i)perylene		0.38	0.031 U	0.03 U	0.36	0.037
Benzo(a)pyrene		1.1	0.031 U	0.03 U	0.14	0.072
Chrysene		1.7	0.031 U	0.041	0.39	0.066
Dibenzo(a,h)anthracene		0.3 U	0.031 U	0.03 U	0.11	0.03 U
Fluoranthene		2.8	0.031 U	0.039	0.33	0.074
Fluorene		0.87	0.031 U	0.03 U	0.31	0.03 U
Indeno(1,2,3-cd)pyrene		0.34	0.031 U	0.03 U	0.24	0.036
Naphthalene		2.1	0.14	0.042	0.03 U	0.03 U
Phenanthrene		3.7	0.076	0.083	0.13	0.03 U
Pyrene		4	0.047	0.033	1.2	0.074
		PCBs	(mg/kg)	•	•	
Aroclor 1016		0.093 U	0.096 U	0.094 U	0.098 U	0.095 U
Aroclor 1221		0.093 U	0.096 U	0.094 U	0.098 U	0.095 U
Aroclor 1232		0.093 U	0.096 U	0.094 U	0.098 U	0.095 U
Aroclor 1242		0.15	0.096 U	0.094 U	0.098 U	0.095 U
Aroclor 1248		0.093 U	0.096 U	0.094 U	0.098 U	0.095 U
Aroclor 1254		0.19 U	0.19 U	0.19 U	0.2 U	0.19 U
Aroclor 1260		0.19 U	0.19 U	0.19 U	0.2 U	0.19 U
Subtotal of PCBs:	50*	0.9	0.9	0.9	0.9	0.9
Subtotal:		24.4	1.5	1.4	4.9	1.6
Total Organic Content:	2,000**	61	35	33	37	33

- (1) Soil saturation limits not available.
- (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (3) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (4) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (5) PAHs Polynuclear Aromatic Hydrocarbons.
- (6) PCBs Polychlorinated Biphenyls.
- (7) mg/kg milligram per kilogram.

		Sample	Sample Location and Depth (feet below ground surface)/Concentration					
	C_{sat}	SP35-003	SP37-002	SP37-003	SB38-001	SP39-002		
Compound/Analyte	(mg/kg)	12-13	8-9	12-13	5-7	5-6		
		TCL Vola	tiles (mg/kg)					
Acetone	100,000	0.042 U	0.082	0.066 J	0.12 J	0.11		
Benzene	870	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
Bromodichloromethane	3,000	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
Bromoform	1,900	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
Bromomethane	3,200	0.017 U	0.02 U	0.023 U	0.029 UJ	0.026 U		
2-Butanone		0.017 U	0.02 U	0.023 U	0.029 UJ	0.027		
Carbon Disulfide	720	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
Carbon Tetrachloride	1,100	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
Chlorobenzene	680	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
Chloroethane		0.017 U	0.02 U	0.023 U	0.029 UJ	0.026 U		
Chloroform	2,900	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
Chloromethane		0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
Dibromochloromethane	1,300	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
1,1-Dichloroethane	1,700	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
1,2-Dichloroethane	1,800	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
1,1-Dichloroethene	1,500	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
cis-1,2-Dichloroethene		0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
trans-1,2-Dichloroethene		0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
1,2-Dichloropropane	1,100	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
cis-1,3-Dichloropropene	1,400	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
trans-1,3-Dichloropropene	1,400	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
Ethylbenzene	400	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
2-Hexanone		0.017 U	0.02 U	0.023 U	0.029 UJ	0.026 U		
4-Methyl-2-Pentanone		0.017 U	0.02 U	0.023 U	0.029 UJ	0.026 U		
Methylene	2,400	0.017 U	0.02 U	0.023 U	0.029 UJ	0.026 U		
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA		
Styrene	1,500	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
1,1,2,2-Tetrachloroethane		0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
Tetrachloroethene	240	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
Toluene	650	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
1,1,1-Trichloroethane	1,200	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
1,1,2-Trichloroethane	1,800	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
Trichloroethene	1,300	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
Vinyl Chloride	1,200	0.017 U	0.02 U	0.023 U	0.029 UJ	0.026 U		
m,p-Xylene	420	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
o-Xylene	410	0.0084 U	0.0099 U	0.012 U	0.014 UJ	0.013 U		
Xylenes, Total	320	NA	NA	NA	NA	NA		
Subtotal:		0.4	0.5	0.6	0.7	0.6		

- NOTES:
 (1) -- Soil saturation limits not available.
- $(2) \ \ U\ \ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (3) J Indicates an estimated value.

- (4) NA Not analyzed.(5) TCL Target Compound List.(6) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration						
	C_{sat}	SP35-003	SP37-002	SP37-003	SB38-001	SP39-002		
Compound/Analyte	(mg/kg)	12-13	8-9	12-13	5-7	5-6		
		TCL Semivo	olatiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
Bis(2-chloroethyl)ether	3,300	0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
1-Bromophenyl phenyl ether		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
Butyl benzyl phthalate	930	0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
Carbazole		0.39 U	0.39 U	0.38 U	0.53	0.4 U		
4-Chloro-3-methylphenol		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
4-Chloroaniline		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
2-Chloronaphthalene		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
2-Chlorophenol	53,000	0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
4-Chlorophenyl phenyl ether		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
Dibenzofuran		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
,2-Dichlorobenzene	560	0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
1,3-Dichlorobenzene		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
,4-Dichlorobenzene		0.39 U	0.39 U	0.38 U	0.42 U	0.4 L		
3,3´-Dichlorobenzidine		0.77 U	0.77 U	0.75 U	0.83 U	0.8 U		
2,4-Dichlorophenol		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
Diethyl phthalate	2,000	0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
Dimethyl phthalate		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
Di-n-butyl phthalate	2,300	0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
2,4-Dimethylphenol		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
4,6-Dinitro-2-methylphenol		1.9 U	1.9 U	1.8 U	2 U	1.9 U		
2,4-Dinitrophenol		1.9 U	1.9 U	1.8 U	2 U	1.9 U		
2,4-Dinitrotoluene		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
2,6-Dinitrotoluene		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
Di-n-octyl phthalate	10,000	0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
Hexachlorobenzene		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
Hexachlorobutadiene		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
Hexachlorocyclopentadiene	2,200	0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
Hexachloroethane		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
sophorone	4,600	0.39 U	0.39 U	0.38 U	0.42 U	0.4 L		
2-Methylnaphthalene		0.39 U	0.39 U	0.38 U	1.7	0.4 U		
2-Methylphenol		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
-Methylphenol		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
2-Nitroaniline		1.9 U	1.9 U	1.8 U	2 U	1.9 U		
3-Nitroaniline		1.9 U	1.9 U	1.8 U	2 U	1.9 U		
l-Nitroaniline		1.9 U	1.9 U	1.8 U	2 U	1.9 U		
Vitrobenzene	1,000	0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
2-Nitrophenol		1.9 U	1.9 U	1.8 U	2 U	1.9 U		
-Nitrophenol		1.9 U	1.9 U	1.8 U	2 U	1.9 U		
N-Nitrosodi-n-propylamine		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
N-Nitrosodiphenylamine		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
2, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.016 U	0.018 U	0.017 U		
Pentachlorophenol		1.9 U	1.9 U	1.8 U	2 U	1.9 U		
Phenol		0.39 U	0.39 U	0.38 U	0.42 U	0.4 U		
,2,4-Trichlorobenzene	3,200	0.39 U	0.39 U	0.38 U	0.42 U	0.4 L		
2,4,5-Trichlorophenol		0.77 U	0.77 U	0.75 U	0.83 U	0.8 U		
2,4,6-Trichlorophenol		0.39 U	0.39 U	0.38 U	0.42 U	0.4 L		
Subtotal	:	31.2	31.2	30.0	34.6	31.6		

^{(1) -} Soil saturation limits not available.

 ^{(1) -} Soft satisfactors into the following analyzed for but not detected; the associated value is the sample reporting limit.
 (3) TCL - Target Compound List.
 (4) mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	ntration
	C_{sat}	SP35-003	SP37-002	SP37-003	SB38-001	SP39-002
Compound/Analyte	(mg/kg)	12-13	8-9	12-13	5-7	5-6
		PAHs	(mg/kg)			
Acenaphthene		0.029 U	0.029 U	0.028 U	0.42	0.056
Acenaphthylene		0.029 U	0.029 U	0.028 U	0.37	0.03 U
Anthracene		0.029 U	0.029 U	0.028 U	1.7	0.29
Benzo(a)anthracene		0.029 U	0.029 U	0.028 U	1.9	0.13
Benzo(b)fluoranthene		0.029 U	0.029 U	0.028 U	1.1	0.58
Benzo(k)fluoranthene		0.029 U	0.029 U	0.028 U	0.96	0.65
Benzo(g,h,i)perylene		0.029 U	0.029 U	0.028 U	0.46	0.31
Benzo(a)pyrene		0.029 U	0.029 U	0.028 U	0.89	0.64
Chrysene		0.029 U	0.029 U	0.028 U	2.3	1.1
Dibenzo(a,h)anthracene		0.029 U	0.029 U	0.028 U	0.15	0.23
Fluoranthene		0.029 U	0.029 U	0.028 U	4.1	1.6
Fluorene		0.029 U	0.029 U	0.028 U	0.7	0.056
Indeno(1,2,3-cd)pyrene		0.029 U	0.029 U	0.028 U	0.38	0.3 U
Naphthalene		0.029 U	0.056	0.028 U	2	0.032
Phenanthrene		0.029 U	0.029 U	0.028 U	5.7	0.81
Pyrene		0.029 U	0.029 U	0.028 U	4.7	1.7
		PCBs	(mg/kg)			
Aroclor 1016		0.095 U	0.092 U	0.092 U	0.1 U	0.1 U
Aroclor 1221		0.095 U	0.092 U	0.092 U	0.1 U	0.1 U
Aroclor 1232		0.095 U	0.092 U	0.092 U	0.1 U	0.1 U
Aroclor 1242		0.095 U	0.092 U	0.092 U	0.1 U	0.1 U
Aroclor 1248		0.095 U	0.092 U	0.092 U	0.1 U	0.1 U
Aroclor 1254		0.19 U	0.18 U	0.18 U	0.2 U	0.2 U
Aroclor 1260		0.19 U	0.18 U	0.18 U	0.2 U	0.2 U
Subtotal of PCBs:	50*	0.9	0.8	0.8	0.9	0.9
Subtotal:		1.3	1.3	1.3	28.7	9.4
Total Organic Content:	2,000**	33	33	32	64	42

- (1) Soil saturation limits not available.
- $(2) \ \ U-Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (3) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (4) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (5) PAHs Polynuclear Aromatic Hydrocarbons.
- (6) PCBs Polychlorinated Biphenyls.
- (7) mg/kg milligram per kilogram.

		Sample	Location and Dep	th (feet below grou	ınd surface)/Conce	entration
	C_{sat}	SP39-003	SP40-002	SP40-003	SP43-002	SP43-003
Compound/Analyte	(mg/kg)	10-11	7-8	14-15	3.5-4.5	11-12
	1 \ -0'0/		tiles (mg/kg)			
Acetone	100,000	0.047 U	0.071	0.043 U	0.063 U	0.041 U
Benzene	870	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
Bromodichloromethane	3,000	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
Bromoform	1,900	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
Bromomethane	3,200	0.019 U	0.02 U	0.017 U	0.025 U	0.017 U
2-Butanone		0.019 U	0.02 U	0.017 U	0.025 U	0.017 U
Carbon Disulfide	720	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
Carbon Tetrachloride	1,100	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
Chlorobenzene	680	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
Chloroethane		0.019 U	0.02 U	0.017 U	0.025 U	0.017 U
Chloroform	2,900	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
Chloromethane		0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
Dibromochloromethane	1,300	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
1,1-Dichloroethane	1,700	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
1,2-Dichloroethane	1,800	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
1,1-Dichloroethene	1,500	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
cis-1,2-Dichloroethene		0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
trans-1,2-Dichloroethene		0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
1,2-Dichloropropane	1,100	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
cis-1,3-Dichloropropene	1,400	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
trans-1,3-Dichloropropene	1,400	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
Ethylbenzene	400	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
2-Hexanone		0.019 U	0.02 U	0.017 U	0.025 U	0.017 U
4-Methyl-2-Pentanone		0.019 U	0.02 U	0.017 U	0.025 U	0.017 U
Methylene	2,400	0.019 U	0.02 U	0.017 U	0.025 U	0.017 U
Methyl tert-butyl ether	8,800	NA	NA	NA	NA	NA
Styrene	1,500	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
1,1,2,2-Tetrachloroethane		0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
Tetrachloroethene	240	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
Toluene	650	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
1,1,1-Trichloroethane	1,200	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
1,1,2-Trichloroethane	1,800	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
Trichloroethene	1,300	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
Vinyl Chloride	1,200	0.019 U	0.02 U	0.017 U	0.025 U	0.017 U
m,p-Xylene	420	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
o-Xylene	410	0.0094 U	0.01 U	0.0087 U	0.013 U	0.0083 U
Xylenes, Total	320	NA	NA	NA	NA	NA
Subtot	al:	0.4	0.5	0.4	0.6	0.4

- NOTES:
 (1) -- Soil saturation limits not available.
- $(2) \ \ U\ \ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (3) NA Not analyzed.
- (4) TCL Target Compound List.
- (5) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dept	th (feet below grou	nd surface)/Concer	ntration
	C_{sat}	SP39-003	SP40-002	SP40-003	SP43-002	SP43-003
Compound/Analyte	(mg/kg)	10-11	7-8	14-15	3.5-4.5	11-12
-		TCL Semivo	olatiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
Bis(2-chloroethyl)ether	3,300	0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
Bis(2-ethylhexyl)phthalate	31,000	0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
4-Bromophenyl phenyl ether		0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
Butyl benzyl phthalate	930	0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
Carbazole		0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
4-Chloro-3-methylphenol		0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
4-Chloroaniline		0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
2-Chloronaphthalene		0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
2-Chlorophenol	53,000	0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
4-Chlorophenyl phenyl ether		0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
Dibenzofuran		0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
1,2-Dichlorobenzene	560	0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
,3-Dichlorobenzene		0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
,4-Dichlorobenzene		0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
3,3´-Dichlorobenzidine		0.77 U	0.77 U	0.77 U	0.78 U	0.78 L
2,4-Dichlorophenol		0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
Diethyl phthalate	2,000	0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
Dimethyl phthalate		0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
Di-n-butyl phthalate	2,300	0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
2,4-Dimethylphenol		0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
,6-Dinitro-2-methylphenol		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dinitrophenol		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dinitrotoluene		0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
2,6-Dinitrotoluene		0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
Di-n-octyl phthalate	10,000	0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
Hexachlorobenzene		0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
Hexachlorobutadiene		0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
Hexachlorocyclopentadiene	2,200	0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
Hexachloroethane		0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
sophorone	4,600	0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
2-Methylnaphthalene		0.38 U	0.39 U	0.39 U	1.6	0.39 U
2-Methylphenol		0.38 U	0.39 U	0.39 U	0.39 U	0.39 U
-Methylphenol		0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
2-Nitroaniline		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
3-Nitroaniline		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
-Nitroaniline		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Vitrobenzene	1,000	0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
2-Nitrophenol		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
-Nitrophenol		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodi-n-propylamine		0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
N-Nitrosodiphenylamine		0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
, 2'-Oxybis(1-Chloropropane)		0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
Pentachlorophenol		1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Phenol		0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
1,2,4-Trichlorobenzene	3,200	0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
2,4,5-Trichlorophenol		0.77 U	0.77 U	0.77 U	0.78 U	0.78 L
2,4,6-Trichlorophenol		0.38 U	0.39 U	0.39 U	0.39 U	0.39 L
Subtota	d:	30.8	31.2	31.2	32.4	31.2

 ^{(1) -} Soft satisfactors into the following analyzed for but not detected; the associated value is the sample reporting limit.
 (3) TCL - Target Compound List.
 (4) mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample	Location and Dep	th (feet below grou	ind surface)/Conce	entration
	C_{sat}	SP39-003	SP40-002	SP40-003	SP43-002	SP43-003
Compound/Analyte	(mg/kg)	10-11	7-8	14-15	3.5-4.5	11-12
		PAHs	(mg/kg)			
Acenaphthene		0.029 U	0.029 U	0.029 U	0.062	0.029 U
Acenaphthylene		0.029 U	0.029 U	0.029 U	0.074	0.029 U
Anthracene		0.03	0.029 U	0.029 U	0.029	0.029 U
Benzo(a)anthracene		0.029 U	0.029 U	0.029 U	0.09	0.029 U
Benzo(b)fluoranthene		0.029 U	0.029 U	0.029 U	0.13	0.029 U
Benzo(k)fluoranthene		0.029 U	0.029 U	0.029 U	0.11	0.029 U
Benzo(g,h,i)perylene		0.029 U	0.029 U	0.029 U	0.087	0.029 U
Benzo(a)pyrene		0.029 U	0.029 U	0.029 U	0.13	0.029 U
Chrysene		0.056	0.029 U	0.029 U	0.16	0.029 U
Dibenzo(a,h)anthracene		0.029 U	0.029 U	0.029 U	0.038	0.029 U
Fluoranthene		0.081	0.029 U	0.029 U	0.17	0.029 U
Fluorene		0.029 U	0.029 U	0.029 U	0.16	0.029 U
Indeno(1,2,3-cd)pyrene		0.029 U	0.029 U	0.029 U	0.076	0.029 U
Naphthalene		0.029 U	0.029 U	0.029 U	0.22	0.029 U
Phenanthrene		0.071	0.029 U	0.029 U	0.38	0.029 U
Pyrene		0.076	0.029 U	0.029 U	0.088	0.029 U
		PCBs	(mg/kg)			
Aroclor 1016		0.095 U	0.093 U	0.094 U	0.099 U	0.097 U
Aroclor 1221		0.095 U	0.093 U	0.094 U	0.099 U	0.097 U
Aroclor 1232		0.095 U	0.093 U	0.094 U	0.099 U	0.097 U
Aroclor 1242		0.14	0.093 U	0.094 U	0.28	0.097 U
Aroclor 1248		0.095 U	0.093 U	0.094 U	0.099 U	0.097 U
Aroclor 1254		0.19 U	0.19 U	0.19 U	0.26	0.19 U
Aroclor 1260		0.19 U	0.19 U	0.19 U	0.2 U	0.19 U
Subtotal of PCBs:	50*	0.9	0.8	0.9	1.1	0.9
Subtotal:		1.5	1.3	1.3	3.1	1.3
Total Organic Content:	2,000**	33	33	33	36	33

- (1) Soil saturation limits not available.
- (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (3) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (4) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (5) PAHs Polynuclear Aromatic Hydrocarbons.
- (6) PCBs Polychlorinated Biphenyls.
- (7) mg/kg milligram per kilogram.

		Sar	nple Location and	Depth (feet below	ground surface)/Conce	entration
	C_{sat}	SP44-002	SP44-003	SB45-002	SB46-001	SB46-002
Compound/Analyte	(mg/kg)	6-7	12-13	3-5	10 - 12	16 -18
•		TCL	Volatiles (mg/kg)			
Acetone	100,000	0.082	0.069 U	0.09 U	0.036 U	0.031 U
Benzene	870	0.0089 U	0.014 U	0.48	0.0073 U	0.0062 U
Bromodichloromethane	3,000	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
Bromoform	1,900	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
Bromomethane	3,200	0.018 U	0.028 U	0.036 U	0.015 U	0.012 U
2-Butanone		0.018 U	0.028 U	0.036 U	0.015 U	0.012 U
Carbon Disulfide	720	0.0089 U	0.014 U	0.037	0.0073 U	0.0062 U
Carbon Tetrachloride	1,100	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
Chlorobenzene	680	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
Chloroethane		0.018 U	0.028 U	0.036 U	0.015 U	0.012 U
Chloroform	2,900	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
Chloromethane		0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
Dibromochloromethane	1,300	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
1,1-Dichloroethane	1,700	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
1,2-Dichloroethane	1,800	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
1,1-Dichloroethene	1,500	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
cis-1,2-Dichloroethene		0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
trans-1,2-Dichloroethene		0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
1,2-Dichloropropane	1,100	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
cis-1,3-Dichloropropene	1,400	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
trans-1,3-Dichloropropene	1,400	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
Ethylbenzene	400	0.0089 U	0.014 U	5.1	0.0073 U	0.0062 U
2-Hexanone		0.018 U	0.028 U	0.036 U	0.015 U	0.012 U
4-Methyl-2-Pentanone		0.018 U	0.028 U	0.036 U	0.015 U	0.012 U
Methylene	2,400	0.018 U	0.028 U	0.036 U	0.015 U	0.012 U
Methyl tert-butyl ether	8,800	NA	NA	NA	0.0073 U	0.0062 U
Styrene	1,500	0.0089 U	0.014 U	2.2	0.0073 U	0.0062 U
1,1,2,2-Tetrachloroethane		0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
Tetrachloroethene	240	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
Toluene	650	0.0089 U	0.014 U	4.4	0.0073 U	0.0062 U
1,1,1-Trichloroethane	1,200	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
1,1,2-Trichloroethane	1,800	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
Trichloroethene	1,300	0.0089 U	0.014 U	0.018 U	0.0073 U	0.0062 U
Vinyl Chloride	1,200	0.018 U	0.028 U	0.036 U	0.0073 U	0.0062 U
m,p-Xylene	420	0.0089 U	0.014 U	11	NA	NA
o-Xylene	410	0.0089 U	0.014 U	6	NA	NA
Xylenes, Total	320	NA	NA	NA	0.015 U	0.012 U
Subtota	al:	0.4	0.6	29.9	0.3	0.3

- NOTES:

 (1) Soil saturation limits not available.

 (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (3) NA Not analyzed.
- (4) TCL Target Compound List.
- (5) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration						
	C_{sat}	SP44-002	SP44-003	SB45-002	SB46-001	SB46-002		
Compound/Analyte	(mg/kg)	6-7	12-13	3-5	10 - 12	16 -18		
•			mivolatiles (mg/kg)				
Bis(2-chloroethoxy)methane		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
Bis(2-chloroethyl)ether	3,300	0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
Bis(2-ethylhexyl)phthalate	31,000	0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
4-Bromophenyl phenyl ether		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
Butyl benzyl phthalate	930	0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
Carbazole		0.4 U	0.39 U	28	0.87	0.42 U		
1-Chloro-3-methylphenol		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
I-Chloroaniline		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
2-Chloronaphthalene		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
2-Chlorophenol	53,000	0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
4-Chlorophenyl phenyl ether		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
Dibenzofuran		0.4 U	0.39 U	22	1.8	0.42 U		
,2-Dichlorobenzene	560	0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
,3-Dichlorobenzene		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
,4-Dichlorobenzene		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
3,3´-Dichlorobenzidine		0.79 U	0.77 U	2.4 U	0.86 U	0.83 U		
2,4-Dichlorophenol		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
Diethyl phthalate	2,000	0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
Dimethyl phthalate		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
Di-n-butyl phthalate	2,300	0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
2,4-Dimethylphenol		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
,6-Dinitro-2-methylphenol		1.9 U	1.9 U	5.8 U	2.1 U	2 U		
2,4-Dinitrophenol		1.9 U	1.9 U	5.8 U	2.1 U	2 U		
2,4-Dinitrotoluene		0.4 U	0.39 U	1.2 U	0.22 U	0.21 U		
2,6-Dinitrotoluene		0.4 U	0.39 U	1.2 U	0.22 U	0.21 U		
Di-n-octyl phthalate	10,000	0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
Hexachlorobenzene		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
Hexachlorobutadiene		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
Hexachlorocyclopentadiene	2,200	0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
Hexachloroethane		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
sophorone	4,600	0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
2-Methylnaphthalene		0.4 U	0.39 U	5.3	2.8	0.42 U		
2-Methylphenol		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
-Methylphenol		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
2-Nitroaniline		1.9 U	1.9 U	5.8 U	2.1 U	2 U		
3-Nitroaniline		1.9 U	1.9 U	5.8 U	2.1 U	2 U		
-Nitroaniline		1.9 U	1.9 U	5.8 U	2.1 U	2 U		
Vitrobenzene	1,000	0.4 U	0.39 U	1.2 U	0.22 U	0.21 U		
2-Nitrophenol		1.9 U	1.9 U	5.8 U	0.43 U	0.42 U		
-Nitrophenol		1.9 U	1.9 U	5.8 U	2.1 U	2 U		
N-Nitrosodi-n-propylamine		0.4 U	0.39 U	1.2 U	0.22 U	0.21 U		
N-Nitrosodiphenylamine		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
2, 2'-Oxybis(1-Chloropropane)		0.017 U	0.016 U	1.2 U	0.43 U	0.42 U		
Pentachlorophenol		1.9 U	1.9 U	5.8 U	2.1 U	2 U		
Phenol		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
1,2,4-Trichlorobenzene	3,200	0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
2,4,5-Trichlorophenol		0.79 U	0.77 U	2.4 U	0.86 U	0.83 U		
2,4,6-Trichlorophenol		0.4 U	0.39 U	1.2 U	0.43 U	0.42 U		
Subtotal:		31.6	31.2	148.5	36.5	31.2		

^{(1) – 30}n saturation limits hot available.

(2) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

(3) TCL - Target Compound List.

(4) mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration					
	C_{sat}	SP44-002	SP44-003	SB45-002	SB46-001	SB46-002	
Compound/Analyte	(mg/kg)	6-7	12-13	3-5	10 - 12	16 -18	
		P	AHs (mg/kg)				
Acenaphthene		0.03 U	0.029 U	12	4.9	0.17	
Acenaphthylene		0.03 U	0.029 U	21	0.73	0.033	
Anthracene		0.03 U	0.029 U	47	6.4	0.19	
Benzo(a)anthracene		0.03 U	0.029 U	14	5.8	0.17	
Benzo(b)fluoranthene		0.03 U	0.029 U	7	4.5	0.075	
Benzo(k)fluoranthene		0.03 U	0.029 U	6.2	4.1	0.12	
Benzo(g,h,i)perylene		0.03 U	0.029 U	3.4	2.7	0.046	
Benzo(a)pyrene		0.03 U	0.029 U	7	5.9	0.086	
Chrysene		0.03 U	0.029 U	25	5.4	0.2	
Dibenzo(a,h)anthracene		0.03 U	0.029 U	1.1	0.83	0.031 U	
Fluoranthene		0.03 U	0.029 U	33	13	0.42	
Fluorene		0.03 U	0.029 U	60	3.8	0.13	
Indeno(1,2,3-cd)pyrene		0.03 U	0.029 U	2.8	2.4	0.035	
Naphthalene		0.03 U	0.029 U	360	6.5	0.4	
Phenanthrene		0.03 U	0.029 U	170	17	0.6	
Pyrene		0.03 U	0.029 U	60	14	0.52	
		P	CBs (mg/kg)	-			
Aroclor 1016		0.096 U	0.093 U	0.095 U	NA	NA	
Aroclor 1221		0.096 U	0.093 U	0.095 U	NA	NA	
Aroclor 1232		0.096 U	0.093 U	0.095 U	NA	NA	
Aroclor 1242		0.096 U	0.093 U	0.16	NA	NA	
Aroclor 1248		0.096 U	0.093 U	0.095 U	NA	NA	
Aroclor 1254		0.19 U	0.19 U	0.19 U	NA	NA	
Aroclor 1260		0.19 U	0.19 U	0.19 U	NA	NA	
Subtotal of PCBs:	50*	0.9	0.8	0.9	NA	NA	
Subtotal:		1.3	1.3	830.4	98.0	3.2	
Total Organic Content:	2,000**	33	33	1,009	135	35	

- (1) -- Soil saturation limits not available.
- (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (3) NA Not analyzed.
- (4) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (5) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (6) PAHs Polynuclear Aromatic Hydrocarbons.
- (7) PCBs Polychlorinated Biphenyls.
- (8) mg/kg milligram per kilogram.

		Sample Location and Depth (feet below ground surface)/Concentration						
	C_{sat}	SB47-001	SB47-002	SB48-001	SB48-002	SB49-001		
Compound/Analyte	(mg/kg)	12 - 14	16 -18	8 -10	18 - 20	8 - 10		
1	<u>, , , , , , , , , , , , , , , , , , , </u>	TCI	Volatiles (mg/kg)					
Acetone	100,000	0.035 U	0.032 U	0.036 U	0.03 U	0.029 U		
Benzene	870	0.05	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
Bromodichloromethane	3,000	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
Bromoform	1,900	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
Bromomethane	3,200	0.014 U	0.013 U	0.014 U	0.012 U	0.012 U		
2-Butanone		0.014 U	0.013 U	0.014 U	0.012 U	0.012 U		
Carbon Disulfide	720	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
Carbon Tetrachloride	1,100	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
Chlorobenzene	680	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
Chloroethane		0.014 U	0.013 U	0.014 U	0.012 U	0.012 U		
Chloroform	2,900	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
Chloromethane		0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
Dibromochloromethane	1,300	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
1,1-Dichloroethane	1,700	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
1,2-Dichloroethane	1,800	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
1,1-Dichloroethene	1,500	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
cis-1,2-Dichloroethene		0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
trans-1,2-Dichloroethene		0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
1,2-Dichloropropane	1,100	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
cis-1,3-Dichloropropene	1,400	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
trans-1,3-Dichloropropene	1,400	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
Ethylbenzene	400	0.33	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
2-Hexanone		0.014 U	0.013 U	0.014 U	0.012 U	0.012 U		
4-Methyl-2-Pentanone		0.014 U	0.013 U	0.014 U	0.012 U	0.012 U		
Methylene	2,400	0.014 U	0.013 U	0.014 U	0.012 U	0.012 U		
Methyl tert-butyl ether	8,800	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
Styrene	1,500	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
1,1,2,2-Tetrachloroethane		0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
Tetrachloroethene	240	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
Toluene	650	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
1,1,1-Trichloroethane	1,200	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
1,1,2-Trichloroethane	1,800	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
Trichloroethene	1,300	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
Vinyl Chloride	1,200	0.0071 U	0.0065 U	0.0072 U	0.0059 U	0.0059 U		
m,p-Xylene	420	NA	NA	NA	NA	NA		
o-Xylene	410	NA	NA	NA	NA	NA		
Xylenes, Total	320	0.26	0.013 U	0.014 U	0.012 U	0.012 U		
Subtotal	:	0.9	0.3	0.3	0.3	0.3		

NOTES:
(1) - Soil saturation limits not available.
(2) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
(3) NA - Not analyzed.

⁽⁴⁾ TCL - Target Compound List.

⁽⁵⁾ mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration						
	C _{sat}	SB47-001	SB47-002	SB48-001	SB48-002	SB49-001		
Compound/Analyte	(mg/kg)	12 - 14	16 -18	8 -10	18 - 20	8 - 10		
-		TCL Se	emivolatiles (mg/kg)					
Bis(2-chloroethoxy)methane		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
Bis(2-chloroethyl)ether	3,300	0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
Bis(2-ethylhexyl)phthalate	31,000	0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
-Bromophenyl phenyl ether		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
Butyl benzyl phthalate	930	0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
Carbazole		1.1	0.41 U	0.57	0.41 U	0.42 U		
-Chloro-3-methylphenol		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
-Chloroaniline		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
-Chloronaphthalene		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
-Chlorophenol	53,000	0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
-Chlorophenyl phenyl ether		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
Dibenzofuran		2.5	0.41 U	1.5	0.41 U	0.42 U		
,2-Dichlorobenzene	560	0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
,3-Dichlorobenzene		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
,4-Dichlorobenzene		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
,3´-Dichlorobenzidine		0.88 U	0.82 U	0.89 U	0.82 U	0.84 U		
,4-Dichlorophenol		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
Diethyl phthalate	2,000	0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
Dimethyl phthalate		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
Di-n-butyl phthalate	2,300	0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
,4-Dimethylphenol		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
,6-Dinitro-2-methylphenol		2.1 U	2 U	2.2 U	2 U	2 U		
,4-Dinitrophenol		2.1 U	2 U	2.2 U	2 U	2 U		
,4-Dinitrotoluene		0.23 U	0.21 U	0.23 U	0.21 U	0.22 U		
,6-Dinitrotoluene		0.23 U	0.21 U	0.23 U	0.21 U	0.22 U		
i-n-octyl phthalate	10,000	0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
Iexachlorobenzene		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
Iexachlorobutadiene		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
Iexachlorocyclopentadiene	2,200	0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
Iexachloroethane		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
sophorone	4,600	0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
-Methylnaphthalene		27	0.41 U	2.5	1.1	0.42 U		
-Methylphenol		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
-Methylphenol		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
-Nitroaniline		2.1 U	2 U	2.2 U	2 U	2 U		
-Nitroaniline		2.1 U	2 U	2.2 U	2 U	2 U		
-Nitroaniline		2.1 U	2 U	2.2 U	2 U	2 U		
Vitrobenzene	1,000	0.23 U	0.21 U	0.23 U	0.21 U	0.22 U		
-Nitrophenol		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
-Nitrophenol		2.1 U	2 U	2.2 U	2 U	2 U		
-Nitrosodi-n-propylamine		0.23 U	0.21 U	0.23 U	0.21 U	0.22 U		
-Nitrosodiphenylamine		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
, 2'-Oxybis(1-Chloropropane)		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
entachlorophenol		2.1 U	2 U	2.2 U	2 U	2 U		
henol		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
,2,4-Trichlorobenzene	3,200	0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
,4,5-Trichlorophenol		0.88 U	0.82 U	0.89 U	0.82 U	0.84 U		
,4,6-Trichlorophenol		0.44 U	0.41 U	0.44 U	0.41 U	0.42 U		
Subtota	al:	62.1	30.8	36.8	31.5	31.3		

^{(1) – 30}s satisfaction limits not available.

(2) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

(3) TCL - Target Compound List.

(4) mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		S	Sample Location and D	epth (feet below groun	d surface)/Concentration	n
	C_{sat}	SB47-001	SB47-002	SB48-001	SB48-002	SB49-001
Compound/Analyte	(mg/kg)	12 - 14	16 -18	8 -10	18 - 20	8 - 10
			PAHs (mg/kg)			
Acenaphthene		22	0.074	5.9	0.41	0.32
Acenaphthylene		2.7	0.031 U	0.99	0.031 U	0.19
Anthracene		11	0.031 U	9.5	0.16	0.44
Benzo(a)anthracene		9	0.032	8.6	0.11	1
Benzo(b)fluoranthene		4.5	0.031 U	5.5	0.063	0.78
Benzo(k)fluoranthene		5.1	0.031 U	6.2	0.082	0.74
Benzo(g,h,i)perylene		3.9	0.031 U	5.5	0.034	0.68
Benzo(a)pyrene		4.6	0.031 U	9.8	0.088	1
Chrysene		8	0.048	8.1	0.14	1
Dibenzo(a,h)anthracene		0.91	0.031 U	1.2	0.031 U	0.11
Fluoranthene		20	0.072	20	0.22	1.9
Fluorene		13	0.04	3.5	0.26	0.24
Indeno(1,2,3-cd)pyrene		2.5	0.031 U	4.2	0.031 U	0.55
Naphthalene		33	0.13	5.3	7.8	0.2
Phenanthrene		43	0.12	21	0.52	1.3
Pyrene		26	0.088	22	0.21	2.1
			PCBs (mg/kg)			
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Subtotal of PCBs:	50*	NA	NA	NA	NA	NA
Subtotal:		209.2	0.9	137.3	10.2	12.6
Total Organic Content:	2,000**	272	32	174	42	44

- (1) Soil saturation limits not available.
- $(2) \ \ U-Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (3) NA Not analyzed
- (4) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (5) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (6) PAHs Polynuclear Aromatic Hydrocarbons.
- (7) PCBs Polychlorinated Biphenyls.
- (8) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Samp	le Location and De	pth (feet below grou	ind surface)/Concent	tration
	C_{sat}	SB49B-001	SB50-001	SB50-002	SB50-003	SB51-001
Compound/Analyte	(mg/kg)	14 - 16	10 - 12	14 - 16	20 - 22	10 -12
	<u>,, </u>	TCL Vo	olatiles (mg/kg)			•
Acetone	100,000	0.031 U	0.082	1.9 U	0.037 U	0.03 U
Benzene	870	0.0063 U	0.13	2.9	0.0073 U	3.7
Bromodichloromethane	3,000	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
Bromoform	1,900	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
Bromomethane	3,200	0.013 U	0.026 U	0.75 U	0.015 U	0.012 U
2-Butanone		0.013 U	0.026 U	0.75 U	0.015 U	0.012 U
Carbon Disulfide	720	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
Carbon Tetrachloride	1,100	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
Chlorobenzene	680	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
Chloroethane		0.013 U	0.026 U	0.75 U	0.015 U	0.012 U
Chloroform	2,900	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
Chloromethane		0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
Dibromochloromethane	1,300	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
1,1-Dichloroethane	1,700	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
1,2-Dichloroethane	1,800	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
1,1-Dichloroethene	1,500	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
cis-1,2-Dichloroethene		0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
trans-1,2-Dichloroethene		0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
1,2-Dichloropropane	1,100	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
cis-1,3-Dichloropropene	1,400	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
trans-1,3-Dichloropropene	1,400	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
Ethylbenzene	400	0.0063 U	0.6	30	0.56	5.8
2-Hexanone		0.013 U	0.026 U	0.75 U	0.015 U	0.012 U
4-Methyl-2-Pentanone		0.013 U	0.026 U	0.75 U	0.015 U	0.012 U
Methylene	2,400	0.013 U	0.026 U	0.75 U	0.015 U	0.012 U
Methyl tert-butyl ether	8,800	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
Styrene	1,500	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
1,1,2,2-Tetrachloroethane		0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
Tetrachloroethene	240	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
Toluene	650	0.0063 U	0.016	0.38 U	0.018	0.0094
1,1,1-Trichloroethane	1,200	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
1,1,2-Trichloroethane	1,800	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
Trichloroethene	1,300	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
Vinyl Chloride	1,200	0.0063 U	0.013 U	0.38 U	0.0073 U	0.006 U
m,p-Xylene	420	NA	NA	NA	NA	NA
o-Xylene	410	NA	NA	NA	NA	NA
Xylenes, Total	320	0.013 U	2.3	21	2.1	3.9
Subtotal:	<u> </u>	0.3	3.6	69.8	3.0	13.7

- NOTES:
 (1) -- Soil saturation limits not available.
 (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (3) NA Not analyzed.
- (4) TCL Target Compound List.
- (5) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Samp	le Location and Dep	oth (feet below grou	nd surface)/Concent	ration
	C_{sat}	SB49B-001	SB50-001	SB50-002	SB50-003	SB51-001
Compound/Analyte	(mg/kg)	14 - 16	10 - 12	14 - 16	20 - 22	10 -12
•	<u>., </u>	TCL Semi	volatiles (mg/kg)			
Bis(2-chloroethoxy)methane		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
Bis(2-chloroethyl)ether	3,300	0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
Bis(2-ethylhexyl)phthalate	31,000	0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
-Bromophenyl phenyl ether		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
Butyl benzyl phthalate	930	0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
Carbazole		0.41 U	0.47 U	0.46 U	0.45 U	4.8
-Chloro-3-methylphenol		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
-Chloroaniline		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
-Chloronaphthalene		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
2-Chlorophenol	53,000	0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
-Chlorophenyl phenyl ether		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
Dibenzofuran		0.41 U	0.47 U	1.2	0.45 U	3.4
,2-Dichlorobenzene	560	0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
,3-Dichlorobenzene		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
,4-Dichlorobenzene		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
3,3´-Dichlorobenzidine		0.82 U	0.93 U	0.91 U	0.89 U	0.87 U
,4-Dichlorophenol		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
Diethyl phthalate	2,000	0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
Dimethyl phthalate		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
Di-n-butyl phthalate	2,300	0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
,4-Dimethylphenol		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
,6-Dinitro-2-methylphenol		2 U	2.3 U	2.2 U	2.2 U	2.1 U
,4-Dinitrophenol		2 U	2.3 U	2.2 U	2.2 U	2.1 U
,4-Dinitrotoluene		0.21 U	0.24 U	0.23 U	0.23 U	0.22 U
,6-Dinitrotoluene		0.21 U	0.24 U	0.23 U	0.23 U	0.22 U
Di-n-octyl phthalate	10,000	0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
Iexachlorobenzene		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
Iexachlorobutadiene		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
Iexachlorocyclopentadiene	2,200	0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
Iexachloroethane		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
sophorone	4,600	0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
-Methylnaphthalene		0.41 U	0.95	7.5	0.45 U	52
-Methylphenol		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
-Methylphenol		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
-Nitroaniline		2 U	2.3 U	2.2 U	2.2 U	2.1 U
-Nitroaniline		2 U	2.3 U	2.2 U	2.2 U	2.1 U
-Nitroaniline		2 U	2.3 U	2.2 U	2.2 U	2.1 U
Vitrobenzene	1,000	0.21 U	0.24 U	0.23 U	0.23 U	0.22 U
-Nitrophenol		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
-Nitrophenol		2 U	2.3 U	2.2 U	2.2 U	2.1 U
I-Nitrosodi-n-propylamine		0.21 U	0.24 U	0.23 U	0.23 U	0.22 U
I-Nitrosodiphenylamine		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
, 2'-Oxybis(1-Chloropropane)		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
entachlorophenol		2 U	2.3 U	2.2 U	2.2 U	2.1 U
henol		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
,2,4-Trichlorobenzene	3,200	0.41 U	0.47 U	0.46 U	0.45 U	0.44 U
2,4,5-Trichlorophenol		0.82 U	0.93 U	0.91 U	0.89 U	0.87 U
2,4,6-Trichlorophenol		0.41 U	0.47 U	0.46 U	0.45 U	0.44 U

^{(1) --} Soil saturation limits not available.

⁽²⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

(3) TCL - Target Compound List.

⁽⁴⁾ mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Samp	le Location and De	pth (feet below grou	ind surface)/Concen	tration
	C_{sat}	SB49B-001	SB50-001	SB50-002	SB50-003	SB51-001
Compound/Analyte	(mg/kg)	14 - 16	10 - 12	14 - 16	20 - 22	10 -12
		PA	Hs (mg/kg)			
Acenaphthene		0.031 U	1.1	3	0.086	28
Acenaphthylene	-	0.031 U	0.57	0.44	0.034 U	4.1
Anthracene	1	0.031 U	1.4	2.6	0.18	20
Benzo(a)anthracene	-	0.035	2.2	3.9	0.42	17
Benzo(b)fluoranthene	-	0.031 U	1.5	2.4	0.27	8.2
Benzo(k)fluoranthene	-	0.032	1.5	3.8	0.38	7.4
Benzo(g,h,i)perylene	-	0.031 U	0.83	0.74	0.077	8
Benzo(a)pyrene	1	0.041	2.3	4.4	0.46	16
Chrysene	-	0.053	2.1	3.1	0.42	17
Dibenzo(a,h)anthracene	-	0.031 U	0.22	0.24	0.037	1.4
Fluoranthene	-	0.058	2.9	7.2	0.66	36
Fluorene	-	0.031 U	0.6	2.2	0.098	21
Indeno(1,2,3-cd)pyrene	1	0.031 U	0.75	0.89	0.098	6.2
Naphthalene	-	0.041	0.32	44	0.52	67
Phenanthrene		0.079	2.3	8.7	0.46	78
Pyrene		0.078	4.2	6.4	0.55	50
		PC	Bs (mg/kg)			
Aroclor 1016		NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA
Subtotal of PCBs:	50*	NA	NA	NA	NA	NA
Subtotal:		0.7	24.8	94.0	4.8	385.3
Total Organic Content:	2,000**	32	64	206	42	491

- (1) -- Soil saturation limits not available.
- (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

- (4) *50 mg/kg PCBs is defined as source material in accordance with TACO. (5) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (6) PAHs Polynuclear Aromatic Hydrocarbons.
- (7) PCBs Polychlorinated Biphenyls.
- (8) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Sample Location	and Depth (feet b	elow ground surface	ce)/Concentration	
	C_{sat}	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	(mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
	<u> </u>		TCL Volatiles (mg				
Acetone	100,000	0.027 U	1.4 U	0.027 U	0.036 U	0.1	0.031 U
Benzene	870	0.0055 U	2.6	0.0089	0.0086	0.21	0.0062 U
Bromodichloromethane	3,000	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
Bromoform	1,900	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
Bromomethane	3,200	0.011 U	0.55 U	0.011 U	0.015 U	0.019 U	0.012 U
2-Butanone		0.011 U	0.55 U	0.011 U	0.015 U	0.023	0.012 U
Carbon Disulfide	720	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
Carbon Tetrachloride	1,100	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
Chlorobenzene	680	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
Chloroethane		0.011 U	0.55 U	0.011 U	0.015 U	0.019 U	0.012 U
Chloroform	2,900	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
Chloromethane		0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
Dibromochloromethane	1,300	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
1,1-Dichloroethane	1,700	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
1,2-Dichloroethane	1,800	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
1,1-Dichloroethene	1,500	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
cis-1,2-Dichloroethene		0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
trans-1,2-Dichloroethene		0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
1,2-Dichloropropane	1,100	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
cis-1,3-Dichloropropene	1,400	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
trans-1,3-Dichloropropene	1,400	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
Ethylbenzene	400	0.0055 U	11	0.043	0.0073 U	1.2	0.0062 U
2-Hexanone		0.011 U	0.55 U	0.011 U	0.015 U	0.019 U	0.012 U
4-Methyl-2-Pentanone		0.011 U	0.55 U	0.011 U	0.015 U	0.019 U	0.012 U
Methylene	2,400	0.011 U	0.55 U	0.011 U	0.018	0.035	0.026
Methyl tert-butyl ether	8,800	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
Styrene	1,500	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
1,1,2,2-Tetrachloroethane		0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
Tetrachloroethene	240	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
Toluene	650	0.0055 U	0.7	0.0097	0.0073 U	0.013	0.0062 U
1,1,1-Trichloroethane	1,200	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
1,1,2-Trichloroethane	1,800	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
Trichloroethene	1,300	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
Vinyl Chloride	1,200	0.0055 U	0.28 U	0.0054 U	0.0073 U	0.0095 U	0.0062 U
m,p-Xylene	420	NA	NA	NA	NA	NA	NA
o-Xylene	410	NA	NA	NA	NA	NA	NA
Xylenes, Total	320	0.024	9.8	0.055	0.015 U	1.7	0.012 U
Subtotal:		0.3	35.5	0.3	0.3	3.6	0.3

NOTES:

(1) -- Soil saturation limits not available.

(2) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽³⁾ NA - Not analyzed.

⁽⁴⁾ TCL - Target Compound List.

⁽⁵⁾ mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Sample Location	and Depth (feet be	elow ground surface	ce)/Concentration	
	C_{sat}	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	(mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
•		TC	CL Semivolatiles (n	ng/kg)			
Bis(2-chloroethoxy)methane		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Bis(2-chloroethyl)ether	3,300	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Bis(2-ethylhexyl)phthalate	31,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Bromophenyl phenyl ether		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Butyl benzyl phthalate	930	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Carbazole		0.41 U	0.4 U	0.39 U	0.41 U	5.1	0.4 U
4-Chloro-3-methylphenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Chloroaniline		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Chloronaphthalene		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Chlorophenol	53,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Chlorophenyl phenyl ether		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Dibenzofuran		0.82	0.91	0.39 U	0.41 U	4.9	0.4 U
1,2-Dichlorobenzene	560	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,3-Dichlorobenzene		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,4-Dichlorobenzene		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
3,3´-Dichlorobenzidine		0.82 U	0.8 U	0.77 U	0.82 U	0.85 U	0.8 U
2,4-Dichlorophenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Diethyl phthalate	2,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Dimethyl phthalate		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Di-n-butyl phthalate	2,300	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2,4-Dimethylphenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
2,4-Dinitrophenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
2,4-Dinitrotoluene		0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
2,6-Dinitrotoluene		0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
Di-n-octyl phthalate	10,000	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorobenzene		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorobutadiene		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachlorocyclopentadiene	2,200	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Hexachloroethane		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Isophorone	4,600	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Methylnaphthalene		4.5	19	1.8	0.41 U	37	0.4 U
2-Methylphenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Methylphenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
3-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
4-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
Nitrobenzene	1,000	0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
2-Nitrophenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
4-Nitrophenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
N-Nitrosodi-n-propylamine		0.21 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U
N-Nitrosodiphenylamine		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2, 2'-Oxybis(1-Chloropropane)		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Pentachlorophenol		2 U	1.9 U	1.9 U	2 U	2.1 U	1.9 U
Phenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
1,2,4-Trichlorobenzene	3,200	0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
2,4,5-Trichlorophenol		0.82 U	0.8 U	0.77 U	0.82 U	0.85 U	0.8 U
2,4,6-Trichlorophenol		0.41 U	0.4 U	0.39 U	0.41 U	0.43 U	0.4 U
Subtotal:		35.3	48.9	30.7	30.8	78.0	29.7

^{(1) —} Soil saturation limits not available.
(2) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
(3) TCL - Target Compound List.
(4) mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Sample Location	and Depth (feet b	elow ground surfac	ce)/Concentration	
	C_{sat}	SB51-002	SB52-001	SB52-002	SB53-001	SB53-002	SB53-003
Compound/Analyte	(mg/kg)	18 - 20	6 - 8	12 - 14	8 - 10	14 - 16	18 - 20
			PAHs (mg/kg)				
Acenaphthene		2.4	3.7	0.19	2	16	0.11
Acenaphthylene		0.47	1	0.066	1.6	2.4	0.046
Anthracene		2.2	2.2	0.12	2.6	16	0.12
Benzo(a)anthracene		2.3	1.8	0.091	5.2	14	0.12
Benzo(b)fluoranthene		1.2	0.71	0.038	1.4	6.4	0.054
Benzo(k)fluoranthene		1.1	0.31	0.035	1.8	6.5	0.076
Benzo(g,h,i)perylene		0.57	0.18	0.029 U	1	1.6	0.042
Benzo(a)pyrene		1.7	1.3	0.07	4.8	11	0.099
Chrysene		2	1.7	0.096	6.8	15	0.14
Dibenzo(a,h)anthracene		0.11	0.1	0.029 U	0.5	1.2	0.03 U
Fluoranthene		3.7	2.7	0.15	7.8	24	0.22
Fluorene		2.5	3.6	0.2	4	19	0.13
Indeno(1,2,3-cd)pyrene		0.59	0.35	0.029 U	0.92	1.8	0.031
Naphthalene		6.1	22	2.3	1.5	41	0.24
Phenanthrene		7.6	11	0.65	14	57	0.48
Pyrene		4.2	4.5	0.22	12	27	0.27
			PCBs (mg/kg)				
Aroclor 1016		NA	NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA	NA
Subtotal of PCBs:	50*	NA	NA	NA	NA	NA	NA
Subtotal:		38.7	57.2	4.3	67.9	259.9	2.2
Total Organic Content:	2,000**	74	142	35	99	342	32

- (1) -- Soil saturation limits not available.
- $(2) \ \ U-Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$
- (3) NA Not analyzed.
- (4) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (5) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (6) PAHs Polynuclear Aromatic Hydrocarbons.
- (7) PCBs Polychlorinated Biphenyls.
- (8) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Sample Location	and Depth (feet b	elow ground surfac	ce)/Concentration	
	C_{sat}	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001	SB57-001
Compound/Analyte	(mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20	10 - 12
Compound Thairte	(g/g/	<u> </u>	TCL Volatiles (mg		12 11		10 12
Acetone	100,000	3.2 U	0.027 U	0.026	0.032 U	0.028 U	0.047 U
Benzene	870	5.7	0.0054 U	0.064	0.0064 U	0.0056 U	0.0093 U
Bromodichloromethane	3,000	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
Bromoform	1,900	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
Bromomethane	3,200	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U	0.019 U
2-Butanone		1.3 U	0.011 U	0.01 U	0.013 U	0.011 U	0.019 U
Carbon Disulfide	720	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
Carbon Tetrachloride	1,100	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
Chlorobenzene	680	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
Chloroethane		1.3 U	0.011 U	0.01 U	0.013 U	0.011 U	0.019 U
Chloroform	2,900	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
Chloromethane		0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
Dibromochloromethane	1,300	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
1,1-Dichloroethane	1,700	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
1,2-Dichloroethane	1,800	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
1,1-Dichloroethene	1,500	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
cis-1,2-Dichloroethene		0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
trans-1,2-Dichloroethene		0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
1,2-Dichloropropane	1,100	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
cis-1,3-Dichloropropene	1,400	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
trans-1,3-Dichloropropene	1,400	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
Ethylbenzene	400	25	0.0054 U	0.11	0.0064 U	0.0056 U	0.0093 U
2-Hexanone		1.3 U	0.011 U	0.01 U	0.013 U	0.011 U	0.019 U
4-Methyl-2-Pentanone		1.3 U	0.011 U	0.01 U	0.013 U	0.011 U	0.019 U
Methylene	2,400	1.3 U	0.011 U	0.01 U	0.013 U	0.011 U	0.019 U
Methyl tert-butyl ether	8,800	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
Styrene	1,500	0.64 U	0.0054 U	0.016	0.0064 U	0.0056 U	0.0093 U
1,1,2,2-Tetrachloroethane		0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
Tetrachloroethene	240	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
Toluene	650	0.84	0.0054 U	0.066	0.0064 U	0.0056 U	0.0093 U
1,1,1-Trichloroethane	1,200	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
1,1,2-Trichloroethane	1,800	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
Trichloroethene	1,300	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
Vinyl Chloride	1,200	0.64 U	0.0054 U	0.005 U	0.0064 U	0.0056 U	0.0093 U
m,p-Xylene	420	NA	NA	NA	NA	NA	NA
o-Xylene	410	NA	NA	NA	NA	NA	NA
Xylenes, Total	320	8.7	0.011 U	0.18	0.013 U	0.011 U	0.019 U
Subtota	al:	66.6	0.2	0.6	0.3	0.3	0.4

NOTES:

(1) -- Soil saturation limits not available.

(2) U -- Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽³⁾ NA - Not analyzed.

⁽⁴⁾ TCL - Target Compound List.

⁽⁵⁾ mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Sample Location	and Depth (feet be	elow ground surfac	e)/Concentration	
	C_{sat}	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001	SB57-001
Compound/Analyte	(mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20	10 - 12
, in the second	(8 8/	<u> </u>	CL Semivolatiles (r				
Bis(2-chloroethoxy)methane		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
Bis(2-chloroethyl)ether	3,300	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
Bis(2-ethylhexyl)phthalate	31,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
4-Bromophenyl phenyl ether		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
Butyl benzyl phthalate	930	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
Carbazole		0.51	0.4 U	0.39 U	0.4 U	0.4 U	4.9
4-Chloro-3-methylphenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
4-Chloroaniline		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
2-Chloronaphthalene		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
2-Chlorophenol	53,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
4-Chlorophenyl phenyl ether		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
Dibenzofuran		1.9	0.4 U	0.39 U	0.4 U	0.4 U	3.4
1,2-Dichlorobenzene	560	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
1,3-Dichlorobenzene		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
1,4-Dichlorobenzene		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
3,3´-Dichlorobenzidine		0.84 U	0.79 U	0.79 U	0.81 U	0.81 U	0.97 U
2,4-Dichlorophenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
Diethyl phthalate	2,000	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
Dimethyl phthalate		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
Di-n-butyl phthalate	2,300	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
2,4-Dimethylphenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
4,6-Dinitro-2-methylphenol		2 U	1.9 U	1.9 U	2 U	2 U	2.4 U
2,4-Dinitrophenol		2 U	1.9 U	1.9 U	2 U	2 U	2.4 U
2,4-Dinitrotoluene		0.22 U	0.2 U	0.2 U	0.21 U	0.21 U	0.25 U
2.6-Dinitrotoluene		0.22 U	0.2 U	0.2 U	0.21 U	0.21 U	0.25 U
Di-n-octyl phthalate	10,000	0.42 U	0.2 U	0.2 U	0.4 U	0.21 U	0.48 U
Hexachlorobenzene		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
Hexachlorobutadiene		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
Hexachlorocyclopentadiene	2,200	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
Hexachloroethane		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
Isophorone	4,600	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
2-Methylnaphthalene		45	0.4 U	0.8	0.4 U	0.4 U	3
2-Methylphenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
4-Methylphenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	2.7
2-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2 U	2.7 2.4 U
3-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2 U	2.4 U
4-Nitroaniline		2 U	1.9 U	1.9 U	2 U	2 U	2.4 U
Nitrobenzene	1,000	0.22 U	0.2 U	0.2 U	0.21 U	0.21 U	0.25 U
2-Nitrophenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
4-Nitrophenol		2 U	1.9 U	1.9 U	2 U	2 U	2.4 U
N-Nitrosodi-n-propylamine		0.22 U	0.2 U	0.2 U	0.21 U	0.21 U	0.25 U
N-Nitrosodiphenylamine		0.42 U	0.2 U	0.2 U	0.21 U	0.21 U	0.23 U
2, 2'-Oxybis(1-Chloropropane)		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
Pentachlorophenol		2 U	1.9 U	1.9 U	2 U	2 U	2.4 U
Phenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
1,2,4-Trichlorobenzene	3,200	0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U
2,4,5-Trichlorophenol		0.42 U	0.4 U	0.39 U	0.4 U	0.4 U	0.48 U 0.97 U
2,4,5-Trichlorophenol		0.42 U	0.79 U 0.4 U	0.79 U	0.81 U	0.81 U	0.97 U 0.48 U
<u> </u>							
Subtotal:		77.4	29.7	29.7	30.5	30.5	48.6

^{(1) --} Soil saturation limits not available.
(2) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
(3) TCL - Target Compound List.
(4) mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Sample Location	and Depth (feet be	elow ground surfac	ce)/Concentration	
	C_{sat}	SB54-001	SB54-002	SB55-001	SB55-002	SB56-001	SB57-001
Compound/Analyte	(mg/kg)	8 - 10	14 - 16	6 - 8	12 - 14	18 - 20	10 - 12
			PAHs (mg/kg)				
Acenaphthene		12	0.046	0.078	0.03 U	0.031 U	3.9
Acenaphthylene		4	0.03 U	0.089	0.03 U	0.031 U	0.85
Anthracene		7.4	0.046	0.099	0.03 U	0.031 U	11
Benzo(a)anthracene		5.4	0.037	0.098	0.03 U	0.031 U	18
Benzo(b)fluoranthene		2.6	0.03 U	0.054	0.03 U	0.031 U	11
Benzo(k)fluoranthene		2.1	0.03 U	0.05	0.03 U	0.031 U	12
Benzo(g,h,i)perylene		1.8	0.03 U	0.033	0.03 U	0.031 U	6.7
Benzo(a)pyrene		4.8	0.034	0.092	0.03 U	0.031 U	15
Chrysene		5.3	0.045	0.1	0.03 U	0.031 U	16
Dibenzo(a,h)anthracene		0.6	0.03 U	0.029 U	0.03 U	0.031 U	1.8
Fluoranthene		9.6	0.062	0.16	0.03 U	0.031 U	31
Fluorene		9.3	0.049	0.15	0.03 U	0.031 U	6.4
Indeno(1,2,3-cd)pyrene		1.6	0.03 U	0.029 U	0.03 U	0.031 U	6.9
Naphthalene		110	0.26	0.95	0.03 U	0.031 U	4.1
Phenanthrene		27	0.15	0.58	0.067	0.037	26
Pyrene		14	0.095	0.31	0.03 U	0.031 U	29
			PCBs (mg/kg)				
Aroclor 1016		NA	NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA	NA
Subtotal of PCBs:	50*	NA	NA	NA	NA	NA	NA
Subtotal:		217.5	1.0	2.9	0.5	0.5	199.7
Total Organic Content:	2,000**	362	31	33	31	31	249

- (1) -- Soil saturation limits not available.
- (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (3) NA Not analyzed.
- (4) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
- (5) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
- (6) PAHs Polynuclear Aromatic Hydrocarbons.
- (7) PCBs Polychlorinated Biphenyls.
- (8) mg/kg milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration					
	C _{sat}	SB57-002	SB58-001	SB58-002	SB58-003	SB59-001	SB59-002
Compound/Analyte	(mg/kg)	16 - 18	12 - 14	16 - 18	8 - 10	6 - 8	16 - 18
Compound/Analyte	(mg/kg)	10 - 10	TCL Volatiles (mg		U 10	<u> </u>	10-10
Acetone	100,000	0.028 U	0.047 U	0.031 U	0.047	0.028 U	0.033 U
Benzene	870	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.028 0	0.0067 U
Bromodichloromethane	3,000	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
Bromoform	1.900	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
Bromomethane	3,200	0.011 U	0.019 U	0.012 U	0.019 U	0.011 U	0.013 U
2-Butanone		0.011 U	0.019 U	0.012 U	0.019 U	0.011 U	0.013 U
Carbon Disulfide	720	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
Carbon Tetrachloride	1,100	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
Chlorobenzene	680	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
Chloroethane		0.011 U	0.019 U	0.012 U	0.019 U	0.011 U	0.013 U
Chloroform	2,900	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
Chloromethane		0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
Dibromochloromethane	1,300	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
1.1-Dichloroethane	1,700	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
1.2-Dichloroethane	1,800	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
1.1-Dichloroethene	1,500	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
cis-1,2-Dichloroethene		0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
trans-1,2-Dichloroethene		0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
1,2-Dichloropropane	1,100	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
cis-1,3-Dichloropropene	1,400	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
trans-1,3-Dichloropropene	1,400	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
Ethylbenzene	400	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.071	0.0067 U
2-Hexanone		0.011 U	0.019 U	0.012 U	0.019 U	0.011 U	0.013 U
4-Methyl-2-Pentanone		0.011 U	0.019 U	0.012 U	0.019 U	0.011 U	0.013 U
Methylene	2,400	0.011 U	0.019 U	0.012 U	0.019 U	0.017	0.016
Methyl tert-butyl ether	8,800	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
Styrene	1,500	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
1,1,2,2-Tetrachloroethane		0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
Tetrachloroethene	240	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
Toluene	650	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
1,1,1-Trichloroethane	1,200	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
1,1,2-Trichloroethane	1,800	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
Trichloroethene	1,300	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
Vinyl Chloride	1,200	0.0057 U	0.0094 U	0.0061 U	0.0093 U	0.0055 U	0.0067 U
m,p-Xylene	420	NA	NA	NA	NA	NA	NA
o-Xylene	410	NA	NA	NA	NA	NA	NA
Xylenes, Total	320	0.011 U	0.019 U	0.012 U	0.019 U	0.044	0.013 U
Subtotal		0.3	0.4	0.3	0.4	0.4	0.3

NOTES:

(1) -- Soil saturation limits not available.

(2) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

⁽³⁾ NA - Not analyzed.

⁽⁴⁾ TCL - Target Compound List.

⁽⁵⁾ mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Sample Location	and Depth (feet be	elow ground surface)/Concentration	
	C_{sat}	SB57-002	SB58-001	SB58-002	SB58-003	SB59-001	SB59-002
Compound/Analyte	(mg/kg)	16 - 18	12 - 14	16 - 18	8 - 10	6 - 8	16 - 18
		T	CL Semivolatiles (r	ng/kg)			
Bis(2-chloroethoxy)methane		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Bis(2-chloroethyl)ether	3,300	0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Bis(2-ethylhexyl)phthalate	31,000	0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
4-Bromophenyl phenyl ether		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Butyl benzyl phthalate	930	0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Carbazole		0.39 U	6.8	0.41 U	0.51 U	0.39 U	0.38 U
4-Chloro-3-methylphenol		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
4-Chloroaniline		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
2-Chloronaphthalene		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
2-Chlorophenol	53,000	0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
4-Chlorophenyl phenyl ether		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Dibenzofuran		0.39 U	4.6	0.41 U	0.51 U	0.39 U	0.38 U
1,2-Dichlorobenzene	560	0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
1,3-Dichlorobenzene		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
1,4-Dichlorobenzene		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
3,3´-Dichlorobenzidine		0.79 U	1.1 U	0.82 U	1 U	0.78 U	0.75 U
2,4-Dichlorophenol		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Diethyl phthalate	2,000	0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Dimethyl phthalate		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Di-n-butyl phthalate	2,300	0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
2,4-Dimethylphenol		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
4,6-Dinitro-2-methylphenol		1.9 U	2.6 U	2 U	2.5 U	1.9 U	1.8 U
2,4-Dinitrophenol		1.9 U	2.6 U	2 U	2.5 U	1.9 U	1.8 U
2,4-Dinitrotoluene		0.2 U	0.28 U	0.21 U	0.26 U	0.2 U	0.19 U
2,6-Dinitrotoluene		0.2 U	0.28 U	0.21 U	0.26 U	0.2 U	0.19 U
Di-n-octyl phthalate	10,000	0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Hexachlorobenzene		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Hexachlorobutadiene		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Hexachlorocyclopentadiene	2,200	0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Hexachloroethane		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Isophorone	4,600	0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
2-Methylnaphthalene		0.39 U	3.8	0.41 U	1.3	0.39 U	0.38 U
2-Methylphenol		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
4-Methylphenol		0.39 U	2.2	0.41 U	0.51 U	0.39 U	0.38 U
2-Nitroaniline		1.9 U	2.6 U	2 U	2.5 U	1.9 U	1.8 U
3-Nitroaniline		1.9 U	2.6 U	2 U	2.5 U	1.9 U	1.8 U
4-Nitroaniline		1.9 U	2.6 U	2 U	2.5 U	1.9 U	1.8 U
Nitrobenzene	1,000	0.2 U	0.28 U	0.21 U	0.26 U	0.2 U	0.19 U
2-Nitrophenol		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
4-Nitrophenol		1.9 U	2.6 U	2 U	2.5 U	1.9 U	1.8 U
N-Nitrosodi-n-propylamine		0.2 U	0.28 U	0.21 U	0.26 U	0.2 U	0.19 U
N-Nitrosodiphenylamine		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
2, 2'-Oxybis(1-Chloropropane)		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Pentachlorophenol		1.9 U	2.6 U	2 U	2.5 U	1.9 U	1.8 U
Phenol		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
1,2,4-Trichlorobenzene	3,200	0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
2,4,5-Trichlorophenol		0.79 U	1.1 U	0.82 U	1 U	0.78 U	0.75 U
2,4,6-Trichlorophenol		0.39 U	0.54 U	0.41 U	0.51 U	0.39 U	0.38 U
Subtotal	1:	29.3	55.7	30.8	39.2	29.3	28.2

^{(1) —} Soil saturation limits not available.
(2) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
(3) TCL - Target Compound List.
(4) mg/kg - milligram per kilogram.

Potential Source Material Calculations for Subsurface Soil Attenuation Capacity and Soil Saturation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location and Depth (feet below ground surface)/Concentration					
	C_{sat}	SB57-002	SB58-001	SB58-002	SB58-003	SB59-001	SB59-002
Compound/Analyte	(mg/kg)	16 - 18	12 - 14	16 - 18	8 - 10	6 - 8	16 - 18
			PAHs (mg/kg)				
Acenaphthene		0.03 U	4.3	0.072	1.3	0.029 U	0.028 U
Acenaphthylene		0.03 U	0.45	0.031 U	0.63	0.029 U	0.028 U
Anthracene		0.03 U	11	0.079	1.1	0.029 U	0.028 U
Benzo(a)anthracene		0.03 U	14	0.065	2.2	0.029 U	0.028 U
Benzo(b)fluoranthene		0.03 U	8.5	0.038	2.3	0.029 U	0.028 U
Benzo(k)fluoranthene		0.03 U	9.8	0.038	1.7	0.029 U	0.028 U
Benzo(g,h,i)perylene		0.03 U	3.2	0.031 U	1.2	0.029 U	0.028 U
Benzo(a)pyrene		0.03 U	12	0.059	2.4	0.029 U	0.028 U
Chrysene		0.037	12	0.061	2	0.029	0.028 U
Dibenzo(a,h)anthracene		0.03 U	1.6	0.031 U	0.45	0.029 U	0.028 U
Fluoranthene		0.056	27	0.14	4.2	0.029	0.028 U
Fluorene		0.03 U	6.2	0.088	1.4	0.029 U	0.028 U
Indeno(1,2,3-cd)pyrene		0.03 U	3.8	0.031 U	1.2	0.029 U	0.028 U
Naphthalene		0.054	4	0.39	0.87	0.087	0.028 U
Phenanthrene		0.11	27	0.24	1.3	0.089	0.075
Pyrene		0.057	23	0.11	4.7	0.05	0.028 U
			PCBs (mg/kg)				
Aroclor 1016		NA	NA	NA	NA	NA	NA
Aroclor 1221		NA	NA	NA	NA	NA	NA
Aroclor 1232		NA	NA	NA	NA	NA	NA
Aroclor 1242		NA	NA	NA	NA	NA	NA
Aroclor 1248		NA	NA	NA	NA	NA	NA
Aroclor 1254		NA	NA	NA	NA	NA	NA
Aroclor 1260		NA	NA	NA	NA	NA	NA
Subtotal of PCBs:	50*	NA	NA	NA	NA	NA	NA
Subtotal:		0.6	167.9	1.5	29.0	0.6	0.5
Total Organic Content:	2,000**	30	224	33	69	30	29

- (1) -- Soil saturation limits not available.
- (2) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
- (3) NA Not analyzed.
- (4) * 50 mg/kg PCBs is defined as source material in accordance with TACO.
 (5) ** 2,000 mg/kg is the natural organic carbon fraction (foc) default value for subsurface soil.
 (6) PAHs Polynuclear Aromatic Hydrocarbons.
- (7) PCBs Polychlorinated Biphenyls.
- (8) mg/kg milligram per kilogram.

Table 11							
	Reactivity of Potential Source Material						
	The Former Willow	Street Station Manufactur	ed Gas Plant Site,				
	164	40 North Kingsbury Portion	n				
	Regulatory Level	Sample Location and	d Depth (feet below ground s	urface)/Concentration			
	(mg/kg)	SP06-003	SB23-003	SP43-002			
Compound/Analyte	(IIIg/kg)	8-10	14-16	3.5-4.5			
Reactive Cyanide and Reactive Sulfide (mg/kg)							
Reactive Cyanide	250	0.87 U	1 U	1.1 U			
Reactive Sulfide	500	22 U	160	23 U			

NOTES:

(1) U - Indicates compound/analyte was analyzed for but not detected, the associated value is the sample reporting limit.

(2) mg/kg - milligrams per kilogram.

Table 12 Soil pH Results The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Sample Location	Depth (feet below ground surface)	рН
SB01-002	8-10	8.49
SP03-002	4-5	7.52
SP05-002	9-10	7.6
SP08-001	0-0.5	7.80
SB09-001	3-5	10.2
SP10-001	0-2	8.67
SP13-002	6-7	8.43
SP16-002	9-10	8.82
SB31-001	2-3	8.21
SB32-002	3-5	8.59
SP34-001	0-0.5	9.81
SP35-001	1-2	10.15
SP37-001	1-2	7.63
SB38-001	5-7	8.67
SP39-002	5-6	8.79
SP44-002	6-7	7.78
MW01-001	18-20	7.53
MW05-001	18-20	7.28

NOTE: (1) pH - Method 9045C.

Table 13 Potential Source Material Toxicity Characteristics The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Regulatory	Sample Location and Depth (feet below ground surface)/Concentration					
	Level	SB04-001	SP06-003	SB23-003	SP35-001	SP43-002	
Analyte	(mg/l)	5-7	8-10	14-16	1-2	3.5-4.5	
TCLP RCRA Metals (mg/l)							
Arsenic	5	NA	0.02 U	0.02 U	NA	0.02 U	
Barium	100	NA	0.87	0.77	NA	1.8	
Cadmium	1	NA	0.01 U	0.01 U	NA	0.023	
Chromium	5	0.062	0.02 U	0.02 U	NA	0.02 U	
Lead	5	NA	0.2	0.3	0.37	0.21	
Mercury	0.2	NA	0.00025 U	0.00025 U	NA	0.00025 U	
Selenium	1	NA	0.02 U	0.02 U	NA	0.02 U	
Silver	5	NA	0.02 U	0.02 U	NA	0.02 U	

- (1) U Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.
 (2) NA Not analyzed.
 (3) mg/l milligrams per liter.
 (4) TCLP Toxcicity Characteristic Leaching Procedure.
 (5) Regulatory level is the concentration corresponding to the characteristic hazardous waste as defined in 35 IAC, 721.

Table 14
Further Evaluation of Soil Migration to Groundwater at the North Branch of the Chicago River
The Former Willow Street Station Manufactured Gas Plant Site,
1640 North Kingsbury Portion

Sample Location and Depth (feet below ground surface)/ Compound	Tier 1 Class II Groundwater Ingestion Screening Level (mg/L) ¹	Surface Water Quality Standard (mg/L) ²	Concentration in Soil (mg/kg)	C River ³ (mg/L)
SP03-001 (2-3)				
Carbazole			2.90	4.50E-03
SP06-002 (3-4)				
Benzene	0.025	0.860	0.78	1.20E-169
Naphthalene	0.22		27	6.77E-294
SP06-003 (8-10)				
Lead	0.1	0.1	0.2*	6.01E-03
SB09-001 (3-5)				
Benzene	0.025	0.860	0.19	5.37E-113
Carbazole			3.7	6.09E-02
SP10-002 (6-7)				
Benzene	0.025	0.860	3.6	2.85E-178
SP10-003 (13-14)				
Benzene	0.025	0.860	0.92	7.29E-179
Naphthalene	0.22		27	7.52E-310
SB19-001 (1-2)				
Carbazole			3.2	5.45E-03
SB24-001 (1-2)				
Carbazole			4.1	6.77E-03
SP25-001 (1-2)				
Benzene	0.025	0.860	1.5	2.46E-253
SP25-002 (3-5)				
Benzene	0.025	0.860	0.22	3.60E-254
Carbazole			5.7	7.44E-03
Benzo(a)anthracene	0.00065		14	3.16E-193
Naphthalene	0.22		28	0.00E+00
SB32-001 (2-3)				
Benzene	0.025	0.860	5.2	4.41E-259
SB32-002 (3-5)				
Benzene	0.025	0.860	0.77	6.53E-260
SP43-002 (3.5-4.5)				
Lead	0.1	0.1	0.21*	1.74E-03
SB47-001 (12-14)				
Benzo(a)anthracene	0.00065		9	3.07E-75
Naphthalene	0.22		33	1.76E-168

Notes:

- (1) Based upon groundwater remediation objective for groundwater component of the groundwater ingestion route
- $\ensuremath{\text{(2)}}\ Based\ upon\ surfae\ water\ qulity\ standards\ in\ 35\ IAC,\ Part\ 302.$
- (3) C River is the calculated contaminant concentration at the river from point source concentration.
- (4) * Based on TCLP result. Units are mg/L.
- (5) mg/kg milligram per kilogram.
- (6) mg/L milligram per liter.
- (7) -- Surface water quality standard is not available.
- $(8)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

Table 14 (continued)

Further Evaluation of Soil Migration to Groundwater at the North Branch of the Chicago River The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Sample Location and Depth (feet below ground surface)/ Compound	Tier 1 Class II Groundwater Ingestion Screening Level (mg/L) ¹	Surface Water Quality Standard (mg/L) ²	Concentration in Soil (mg/kg)	C River ³ (mg/L)				
SB48-001 (8-10)								
Benzo(a)anthracene	0.00065		8.6	1.36E-43				
SB50-002 (14-16)								
Benzene	0.025	0.860	2.9	1.56E-54				
Ethylbenzene	1.0	0.014	30	8.49E-101				
Naphthalene	0.22		44	3.90E-96				
SB51-001 (10-12)								
Benzene	0.025	0.860	3.7	1.91E-54				
Carbazole			4.8	3.26E-01				
Benzo(a)anthracene	0.00065		17	2.59E-43				
Naphthalene	0.22		67	5.52E-96				
SB52-001 (6-8)								
Benzene	0.025	0.860	2.6	7.22E-149				
Naphthalene	0.22		22	5.73E-259				
SB53-002 (14-16)								
Benzene	0.025	0.860	0.21	1.08E-55				
Carbazole			5.1	3.47E-01				
Benzo(a)anthracene	0.00065		14	2.14E-43				
Naphthalene	0.22		41	4.01E-96				
SB54-001 (8-10)								
Benzene	0.025	0.860	5.7	1.58E-148				
Ethylbenzene	1.0	0.014	25	3.16E-272				
Naphthalene	0.22		110	2.41E-258				
SB58-001 (12-14)								
Carbazole			6.8	3.24E-01				
Benzo(a)anthracene	0.00065		14	4.01E-53				

Notes:

- $(1) \ Based \ upon \ groundwater \ remediation \ objective \ for \ groundwater \ component \ of \ the \ groundwater \ ingestion \ route$
- (2) Based upon surfae water qulity standards in 35 IAC, Part 302.
- (3) C River is the calculated contaminant concentration at the river from point source concentration.
- (4) * Based on TCLP result. Units are mg/L.
- (5) mg/kg milligram per kilogram.
- (6) mg/L milligram per liter.
- (7) -- Surface water quality standard is not available.
- $(8)\ U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

Table 15

Further Evaluation of Groundwater Ingestion at the North Branch of the Chicago River Tier 1 Class II Groundwater Ingestion Screening Level Evaluation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Sample Location/Compound	Tier 1 Class II Groundwater Ingestion Screening Level (mg/L)*	Concentration in Groundwater (mg/L)	C River** (mg/L)
MW01-001			
Benzene	0.025	0.21	2.63E-73
MW05-001			•
Benzo(a)anthracene	0.00065	0.00076	6.06E-225
Copper	0.65	1.2	6.83E-03
Lead	0.1	0.96	5.47E-03
Thallium 0.02		0.024	1.37E-04

- (1) mg/L milligrams per liter.
- (2) * Based upon groundwater remediation objective for groundwater component of the groundwater ingestion route (3) ** C River is the calculated contaminant concentration at the river from point source concentration.

Table 16

Further Evaluation of Groundwater Ingestion at the North Branch of the Chicago River Surface Water Quality Standard Evaluation The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Sample Location/Compound	Surface Water Quality Standard (mg/L)*	Concentration in Groundwater (mg/L)	C River ** (mg/L)
MW01-001			
Benzene 0.860		0.21	2.63E-73
MW05-001			
Benzo(a)anthracene		0.00076	6.06E-225
Copper	1.0	1.2	6.83E-03
Lead	0.1	0.96	5.47E-03
nallium		0.024	1.37E-04

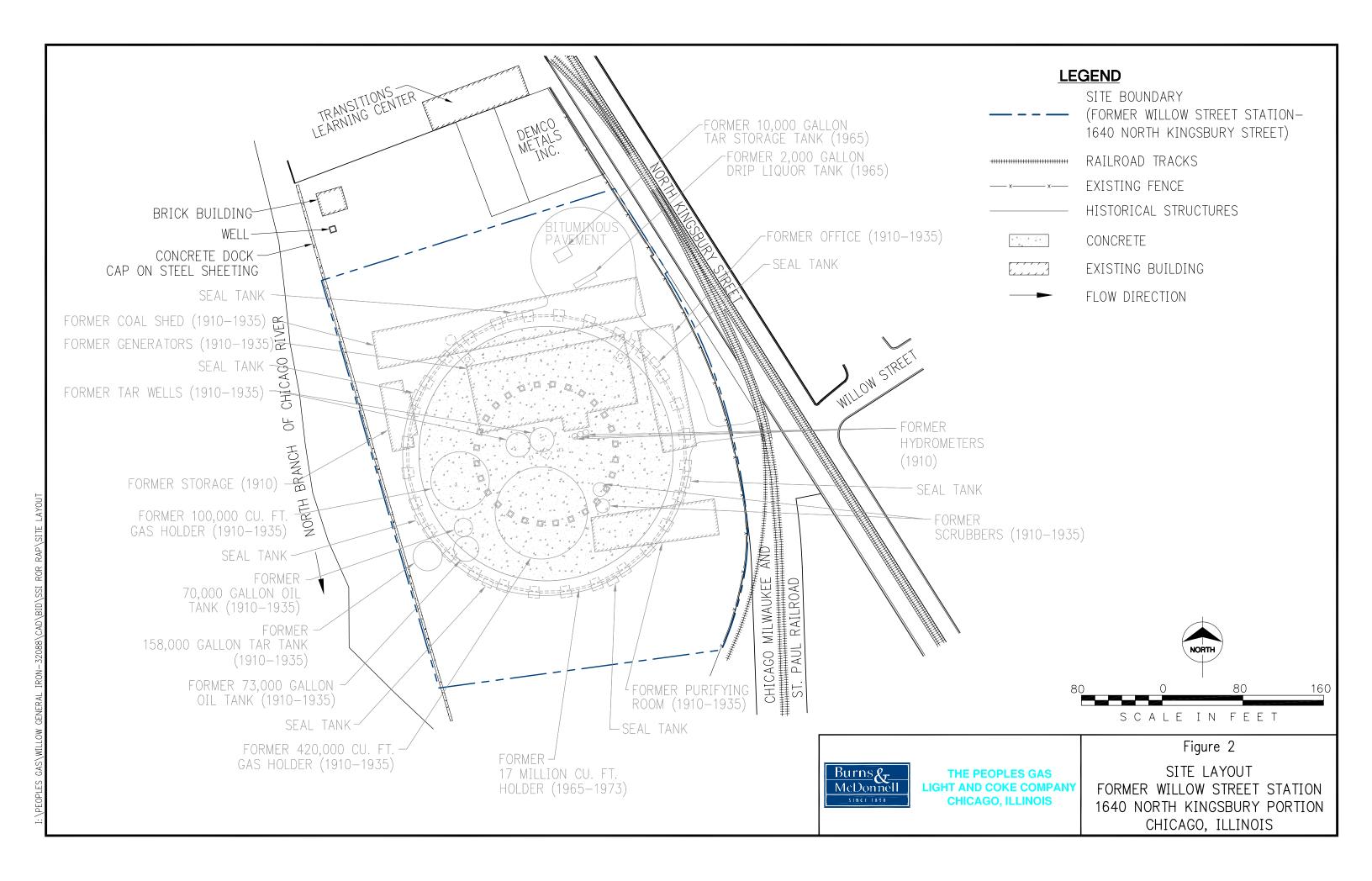
- (1) mg/L milligrams per liter.
- (2) * Based upon surface water quality standard in 35 IAC, 302.
 (3) ** C River is the calculated contaminant concentration at the river from point source concentration.
- (4) -- Surface water quality standard not available.

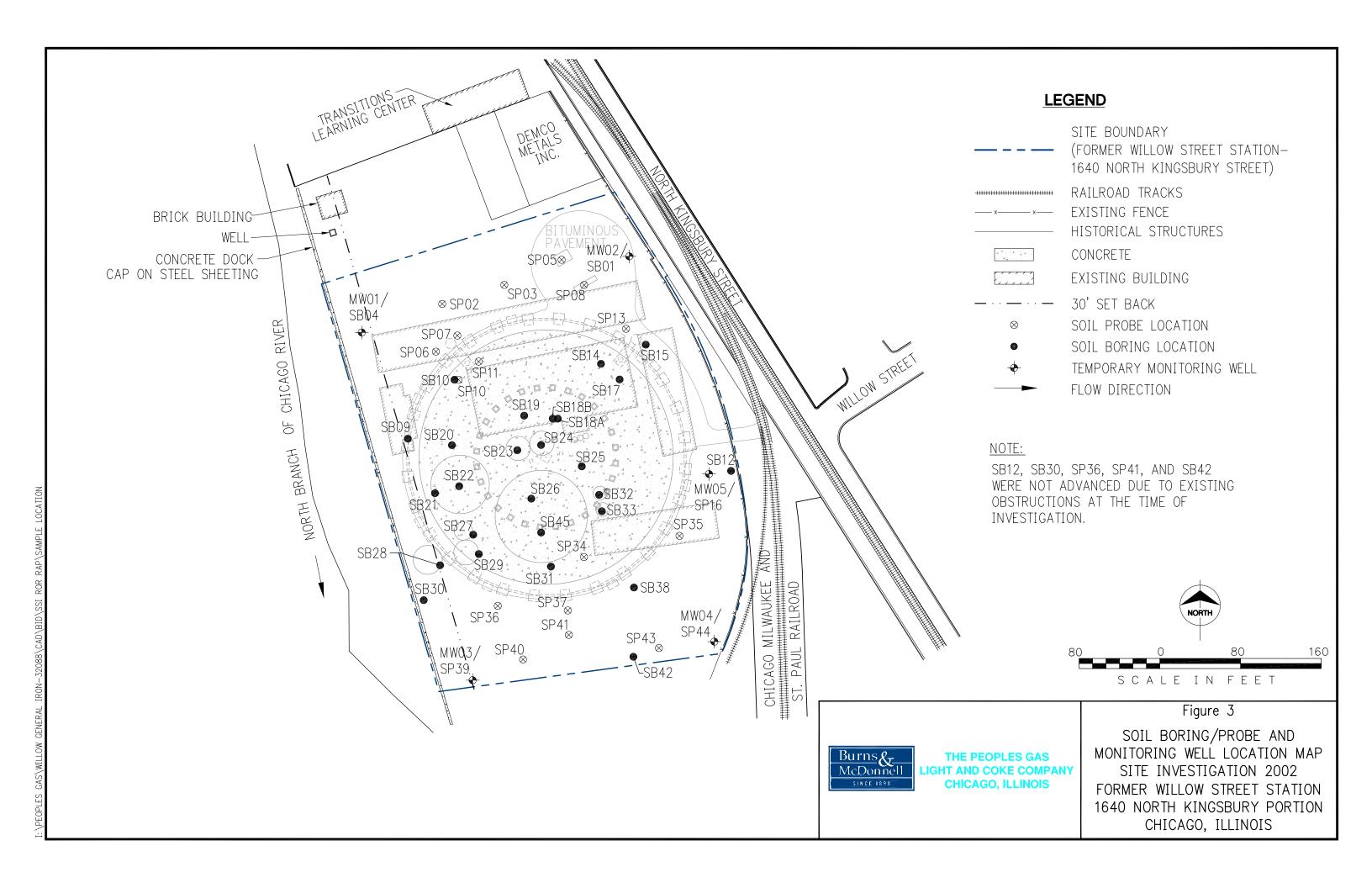
FIGURES
THE FORMER WILLOW STREET STATION
MANUFACTURED GAS PLANT SITE,
1640 NORTH KINGSBURY PORTION

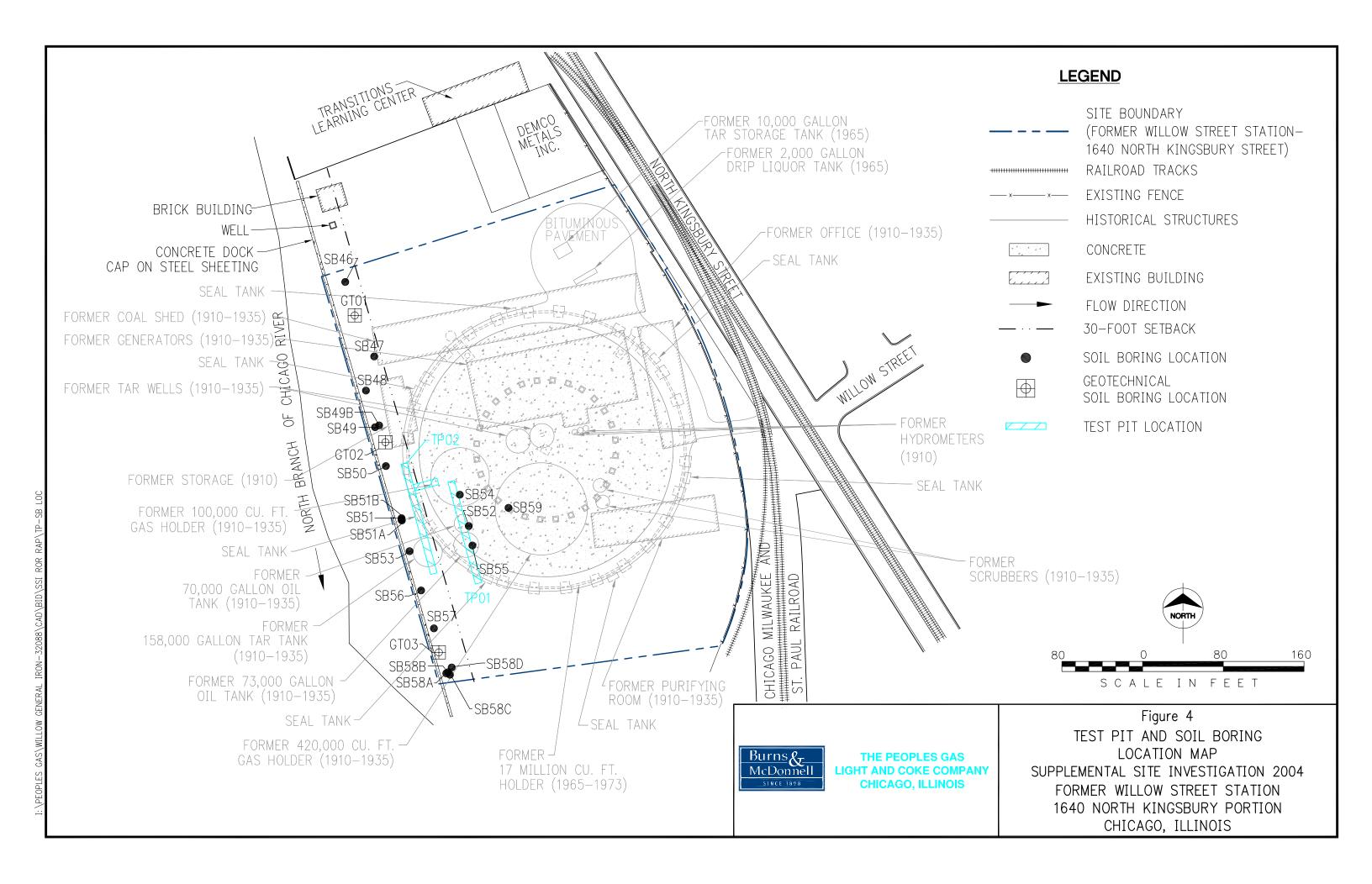
CHICAGO, ILLINOIS

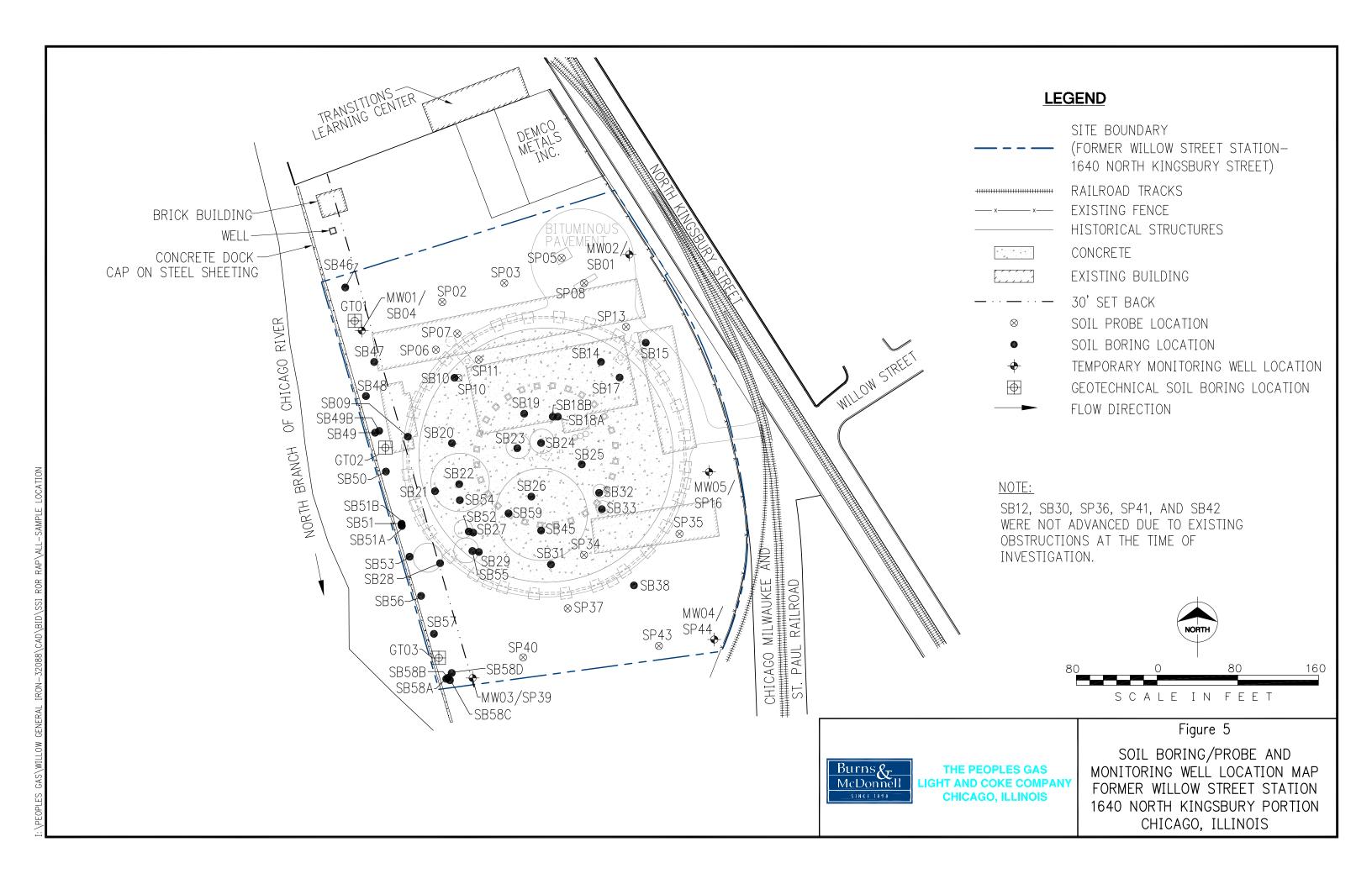
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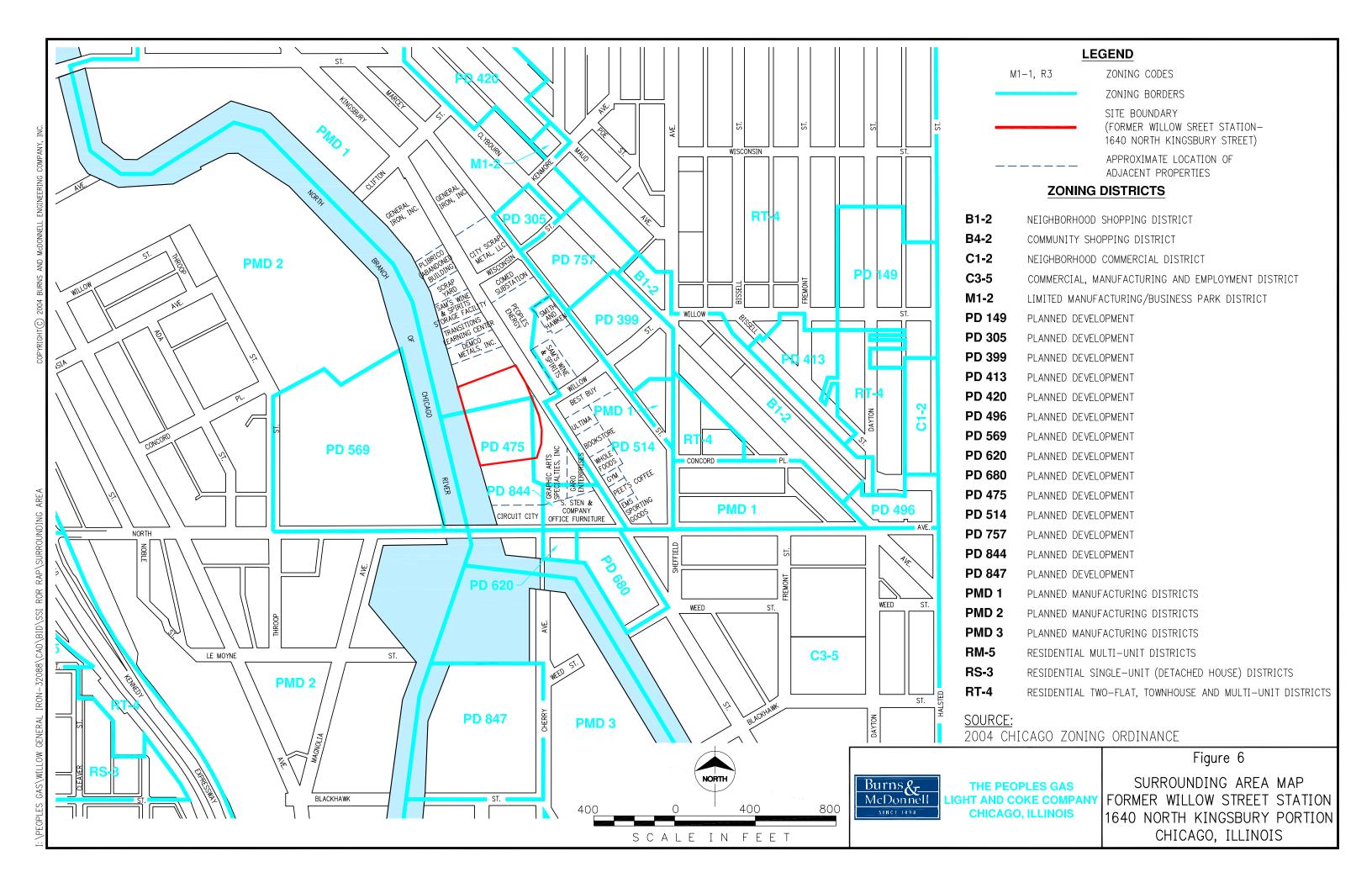
I:PEOPLES GAS/WILLOW GENERAL IRON-32088/CAD/BID/SSI ROR RAP/SITE LOCATION MAP

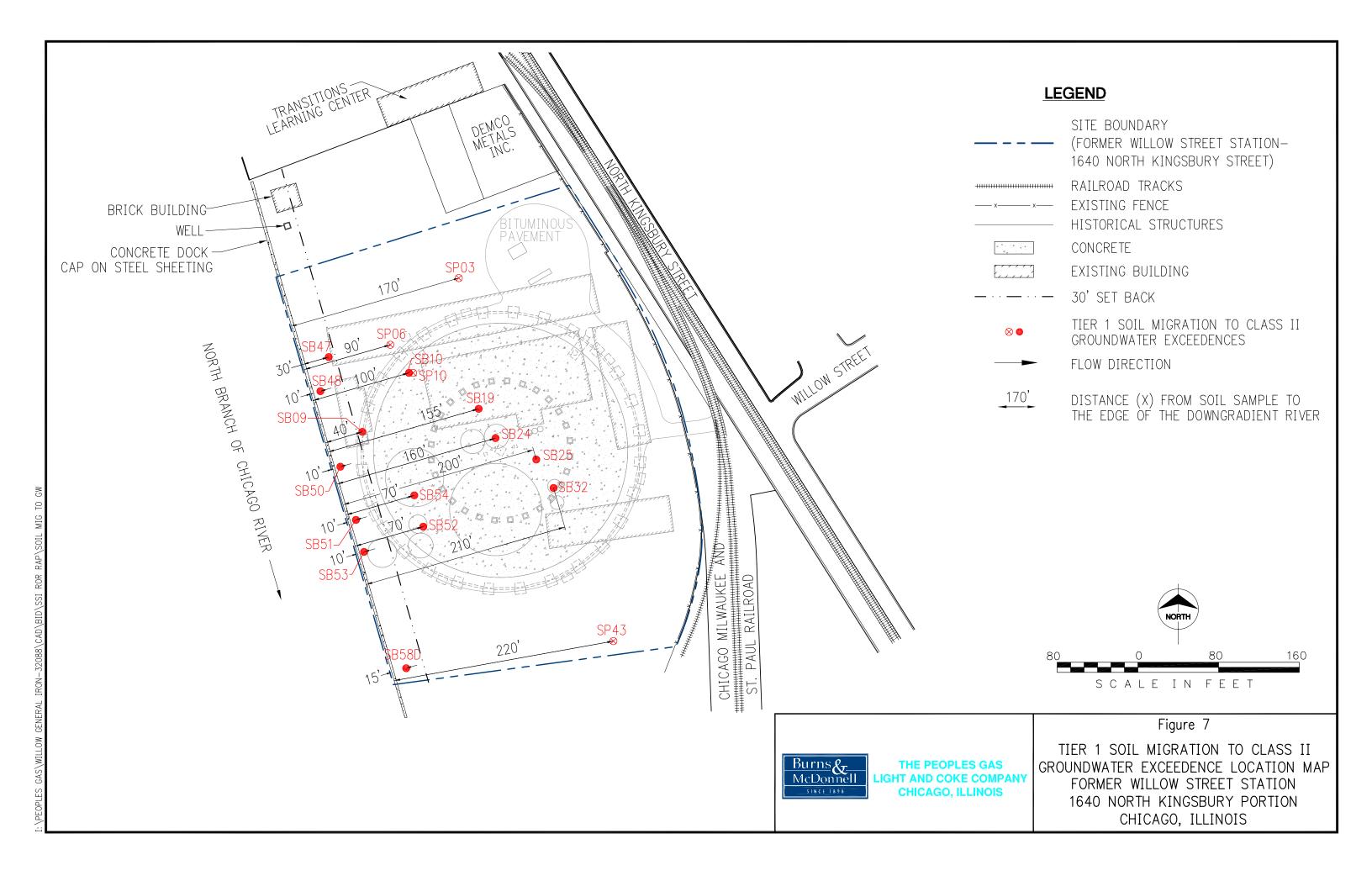


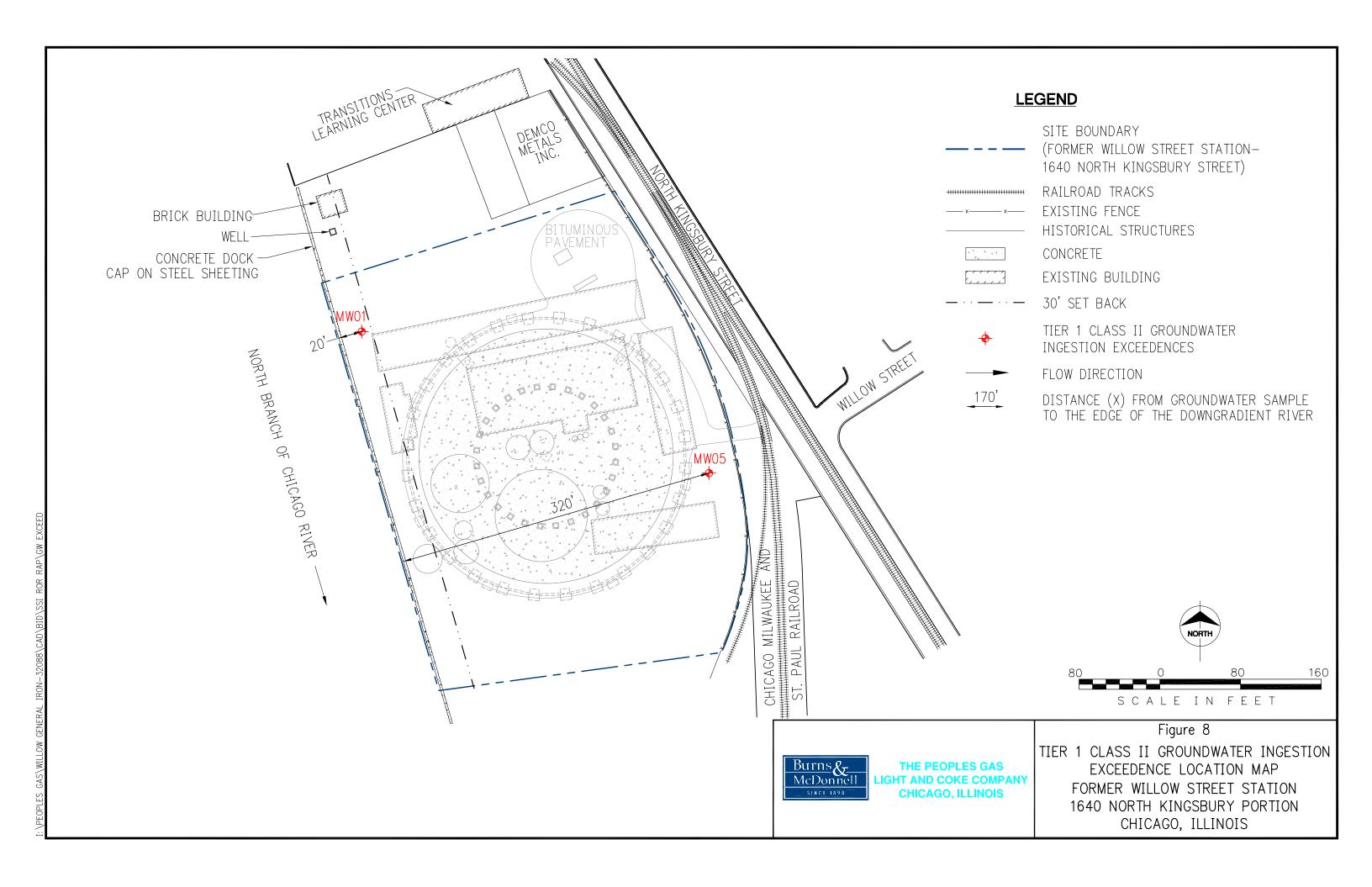


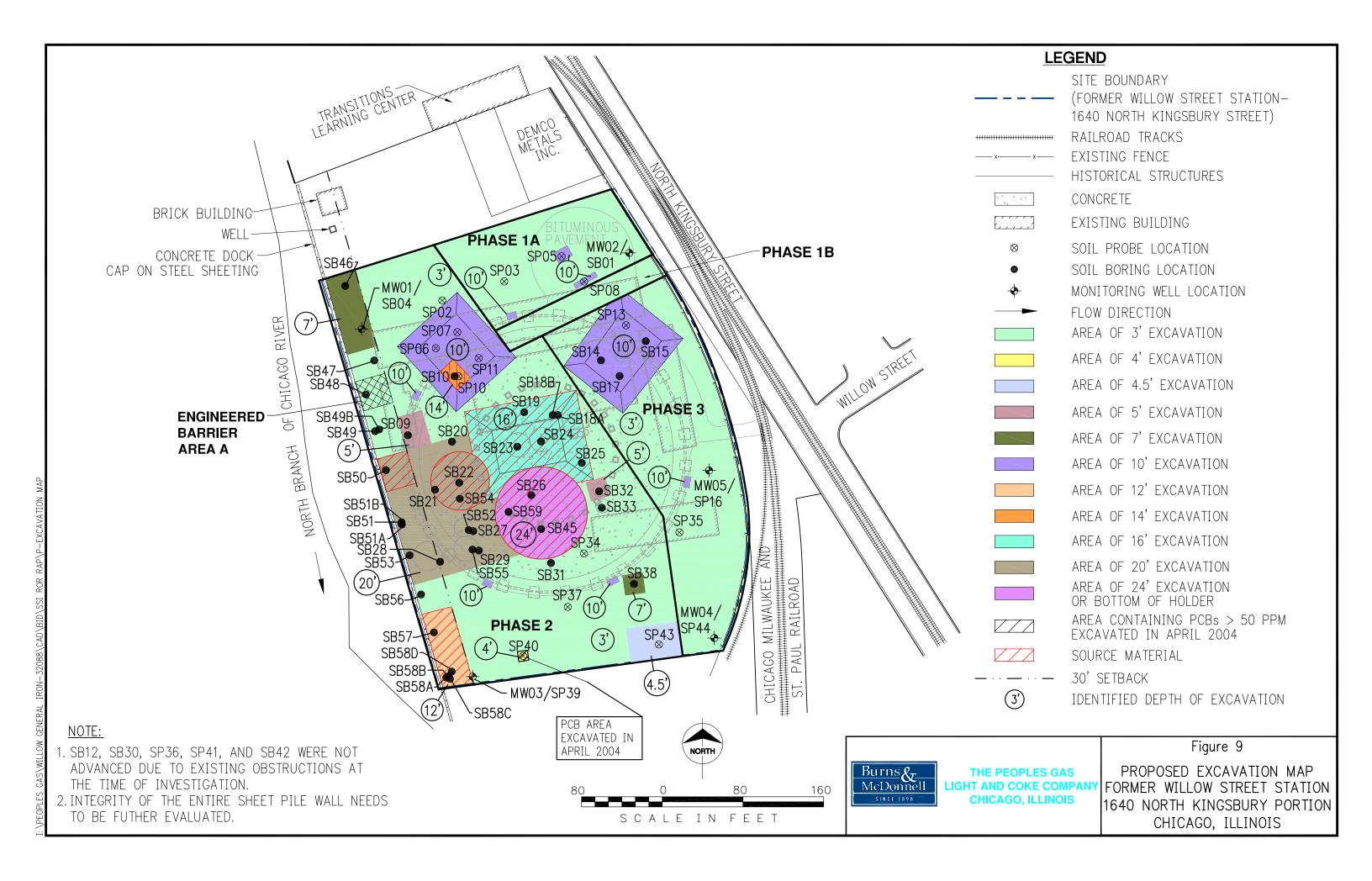


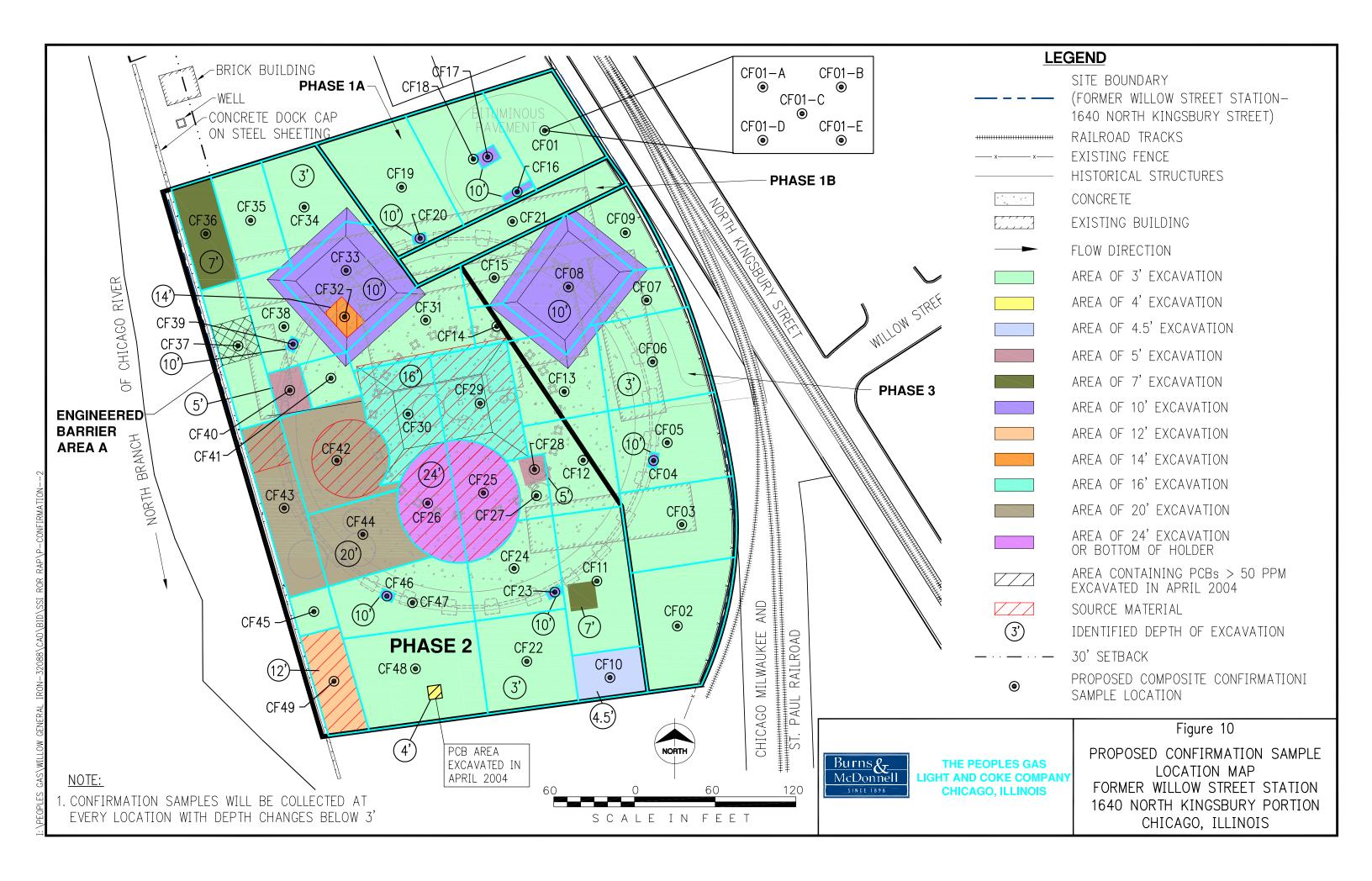












APPENDIX A
SUPPLEMENTAL SITE INVESTIGATION
PHOTO LOG
THE FORMER WILLOW STREET STATION
MANUFACTURED GAS PLANT SITE,
1640 NORTH KINGSBURY PORTION



The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion Date: November 29, 2004

Description:

View of site facing south, before investigation activities begin.



The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion Date: November 29, 2004

Description:

View facing south at the north end of TP01 showing concrete wall, staining and brick rubble.



The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion Date: November 30, 2004

Description: View of TP01 showing brick wall and impacts.



The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion Date: November 30, 2004

Description:

View of TP01 facing north showing brick wall and concrete slab encountered.



The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion Date: December 1, 2004

Description:

View of split spoon from SB51 at 10 to 12 feet below ground surface.



The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion Date: December 1, 2004

Description:

View facing south of TP02 showing abandoned pipe.



The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion Date: December 1, 2004

Description:

View of TP02 showing uncovered sheet metal, abandoned pipe and impacts.



The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion Date: December 1, 2004

Description:

View of TP02 facing north.



The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion Date: December 1, 2004

Description:

View of concrete found at south end of TP02 with tar coating



The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion Date: December 1, 2004

Description:

View of TP02 showing concrete wall on the east side of trench.



The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion Date: December 1, 2004

Description:

View of TP02 show top of tar tank uncovered.



The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion Date: December 1, 2004

Description:

View of site facing north after test trench activities were completed.

APPENDIX B
SUPPLEMENTAL SITE INVESTIGATION
SOIL BORING LOGS
THE FORMER WILLOW STREET STATION
MANUFACTURED GAS PLANT SITE,
1640 NORTH KINGSBURY PORTION

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r	(\bigcap						SAM	IPLING				
	Elevation (feet)	Depth (feet)			Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	
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<u>8</u>	-20	26	Pale yellowish E	Brown (10YR 6/2) silty ce coarse to fine sand,				Р					$q_u = 648 \text{ psf}$ _ $s_u = 324 \text{ psf}$ _
ERAL			medium stiff, lov	w plasticity, moist				U					WC% = 23.8
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	et)	ਜ਼						SAM	PLING			70	
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			Pale yellowish E CLAY (CL), trac medium stiff, lov	Brown (10YR 6/2) silty be coarse to fine sand, w plasticity, moist		vs	2		•				Peak Vane Shear _ s _u = 4140 psf _ Remold = 2068 psf _
	-24	30 = =	medium to very	stiff				8	19	1.5/1.5	2.0	0.0	
	-25	31				SS	3	10	19	1.5/1.5	3.5	0.0	
	-26	32 						Р					q _u = 3954 psf s _u = 1978 psf
	-27	33-				3Т	4	U S H		2/2	2.5	0.0	WC% = 15.5
		34											-
		35				3Т	5	P U S H		2/2	2.75	00	q _u = 4777 psf s _u = 2390 psf WC% = 15.5
3		37 	End of boring a	t 37 feet bgs									
11/8/05		38 -											
S_MO.GDT		39— =											
GPJ BURN		40											
L IRON 1204		41—											
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2	<u> </u>				-				SAM	PLING				
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atio	Depth (feet)					Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	Value	sam very (fee	Penetro- meter (TSF)	PID Reading (PPM)	Depth to water after drilling
Elevation (feet)	Ď		Dogorin	ation			S	ω <u>=</u>	_		Sample Recovery/Length (feet)	<u> </u>	"	Remarks
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5	et)	t						SAM	PLING				
Ĺ	Elevation (feet)	Depth (feet)		ription	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
	-8		Advanced auger shelby tubes and testing in native	rs to 25' bgs to push d conduct vane shear clay.					•				- - -
:	-9	15—	3	•									
-	10	16											
-	11	17— 17—											
	12	18 <u>-</u>											
	13	19											
-	14	20											
-	15	21											
-	16	22-											q _u = Unconfined Compressive Strength
1/8/05	17	23— =											s _u = Shear Strength WC% = water content percent (moisture content)
IS MO.GDT	18	24 											psf = pounds per square foot
4.GPJ BURN	19	25— —	CLAY (CL), trac	Brown (10YR 6/2) silty e coarse to fine sand,				Р					q _u = 1663 psf s _u = 832 psf WC% = 23.7
SAL IRON 120	20	26 = =	meaium stiπ, lov	w plasticity, moist		3Т	1	U S		2/2	0.75	0.0	
LOG GENEF	21	27 				vs	2	Н					Peak Vane Shear _ s _u = 1114 psf _ Remold = 570 psf _
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	Elevation (feet)	Depth (feet)	Desc	ription	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	PLING Nalue	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
	-23		Pale yellowish E CLAY (CL), trac medium stiff, lov	Brown (10YR 6/2) silty e coarse to fine sand, y plasticity, moist					•				- - -
	-24	30 <u> </u>	medium stiff to s	stiff				P U					q _u = 1693 psf s _u = 847 psf WC% = 22.8
	-25	31—				3Т	3	S H		2/2	1.25	0.0	
	-26	32				vs	4						Peak Vane Shear _ s _u = 4136 psf _ Remold = 2068 psf
	-27	33											- - - - -
	-28	34						P U					q _u = 2890 psf s _u = 1445 psf WC% = 19.2
	-29	35— — — —				3Т	5	S H		1.35/2	2.0	0.0	
		36 -	End of boring at	t 36 feet bgs									<u>-</u> -
		37— - - -											-
T 11/8/05		38— — —				The same of							
JRNS_MO.GL		39 - - -											
1204.GPJ BL		40											
ERAL IRON		41 											
AL LOG GEN		42 											
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05		43 - - - - -											

	R	11141	ns &	Project Name Former Willow	Street Station			Proje	ct No. 32088		Borir	ıg/Monito	ring Well GT03	Number
		AGE	Opposit	Coordinates				Ground	Elevation		Page		1 of 3	
ŀ	10	SIN	CE 1898	Total Depth (feet)	83 E 4999 Hole Si	ze (inche	es)	Driller (s	83 .) Jair	me Fave	 la	<u>. </u>		
 	Drilling		Diedrich D120	40		8 <u>1/4</u>			Company			ompany		
ŀ		12-6-0		Logged By:	Kathi Wo	tal		Review		Jason Blaz		1	roved by:	Scott Letzel
ŀ			10 12 0 04	38-1-71						PLING				
	(fee	feet				<u>0</u>					ngth		iding	
	ation	Depth (feet)				Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	Value	ample ery/Le feet)	Penetro- meter (TSF)	PID Reading (PPM)	Depth to water after drilling
	Elevation (feet)	De	Descr	intion			Sa L	Sa	-0 <u>8</u>	>	Sample Recovery/Length (feet)	Pe (Ы	Remarks
ŀ	ш		Blind drill to 27' b	as to push shell	y tubes						<u> </u>			
	5		and conduct van clay.	e shear testing i	n nauve									=
	J	1—												
	4	\exists												=
	•	2-												<u> </u>
	3	=												
		3												
	2]												3
		4												=
	1													
		5												=
	0	6]
İ		=	:											i =
	-1	7_												
]
	-2	8												-
11/8/05]
GDT 1	-3	9												
S MO		1 1												_
BURN	-4	10					:							
04.GPJ														=
ON 12(-5	11-												
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05														=
GENE	-6	12-												
1L LOG	_	_												
MENTA	-7	13—												=
VIRON	_	_												
Ä	-8					L	<u> </u>	<u> </u>	<u> </u>			<u> </u>	L	

_					9 .	3,						-	
	R	uri	15 0_						Boring/M	lonitoring \	Vell Numi		T03
H	<u> </u>	<u> </u>	\mathbb{C}^{10}	Project Name Former Willov	v Street S	tation			Page			2 of 3	
	\mathbb{N}	<u>ICL</u>	onnell_	Project Number 32088					Date			12-6-	.04
		SIN	CE 1898										
F	Ç							SAM	PLING				
	Elevation (feet)	Depth (feet)			Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	
	<u> </u>	ا ۵	Desc	ription		ιχ,	တင	0 &		S Seco	g	<u> </u>	Remarks
H	ш		Blind drill to 27'	bas to push shelby tubes						<u>ir.</u>			
		\exists	and conduct var	bgs to push shelby tubes ne shear testing in native									=======================================
١	-9]_ F	clay.										=
		15											
		▎ ╡											_
1	-10	16											\dashv
													7
	-11	l ∃											=
	-11	17—											
		=											<u>-</u>
	-12	[<u>,</u>]											
		18-											_
									ļ				_
	-13	19											_
		∵ ∃				Ì							
	1.4]											=
	-14	20-							1				=
		7											-
	-15	_											_
		21—											
		╽╶╡											-
	-16	22											q _u = Unconfined _
		┌╴┤											Compressive –
	4-	-											Strength - s. = Shear Strength -
	-17	23-											s _u = Shear Strength WC% = water
1/8/0		7											content percent (moisture content)
딥	-18												psf = pounds per — square foot
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05		24—											Square root
NS N		=											
BUR	-19	25											
GP.		[]				1							
1204		7					Ī						
SON 1	-20	26-											-
AL IR						1							_
NER	-21	_ =											
S GE		27—	Pale yellowish	Brown (10YR 6/2) silty		1		Р	T				q _u = 1049 psf
ĭ Lo		=	CLAY (CL), trac	ce coarse to fine sand, w plasticity, moist		1		1					s _u = 525 psf WC% = 24.5
ATA	-22	28 -	modam dan, lo	bissenary;e.e.		3Т	1	U		2/2	0.6	0.0	
NME						1 "	'	s				•••] =
VIRC								Н					_
ШL	-23				<u> </u>	<u>a</u>		<u></u>	.1		1	<u> </u>	<u> </u>

F	31111	$ns \mathcal{R}_{\tau}$						Boring/M	onitoring \	Vell Num		Т03
	/GT		Project Name Former Willow	w Street S	tation			Page			3 of 3	
	/ICL	Onnell	Project Number 32088					Date			12-6	-04
	SIN	CE 1898						DI INO				
Elevation (feet)	Depth (feet)		ription	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	PLING Nalue	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
-24	30—	Pale yellowish B CLAY (CL), trac medium stiff, lov	Brown (10YR 6/2) silty e coarse to fine sand, o plasticity, moist		vs	2		•				Peak Vane Shears_ = 1295 psf Remold = 660 psf
-25	31—	stiff					P					q _u = 2106 psf
-26	32 				3Т	3	U S		2/2	1.5	0.0	s _u = 1053 psf - WC% = 15.8 -
-27	33-				vs	4	Н					Peak Vane Shear _ s _u = 3386 psf _ Remold = 1732 psf _
-28 -29	34—											
-30	35— - - 36— -				3Т	5	P U S H		2/2	2.0	0.0	q _u = 3103 psf
-31	37—											
	38 39				3 T	6	P U	,	2/2	2.0	0.0	q _u = 4119 psf
-34	40-	End of boring at	40 feet bgs				S H					
NON ISON	41— - -											
3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3	42				i i i i i i i i i i i i i i i i i i i							- - - - -
	43— — — —											-

ſ	Б	11111	$ns \mathcal{R}_{\tau}$	Project Name Former Willow Stree	et Station			Proje	ct No. 32088		Borir	ng/Monitor	ring Well SB46	Number
H	<u> </u>		lio Q	Coordinates				Ground	Elevation		Page)	1 of 2	
	<u> 1</u> V	SIMO	CE 1898	N 5398.416 Total Depth (feet)		ze (inche	es)	Driller (.10 Ma	rk Natali			1012	
L				18		8 1/4		<u> </u>	<u> </u>			ompany		
H	Orilling		Diedrich D120						Company					Scott Letzel
Ľ	_	11-30-0	04 то 11-30-04	Logged By: Ka	athi Wo	tal		Review		Jason Bla	zier	Appr	roved by:	Scoll Leizei
	Elevation (feet)	et)						Γ	SAIVI	PLING	₽		Б	Depth to water
ł) L	Depth (feet)				Graphic Log	<u>o</u> "	<u> 9</u>	// nts .5'		ole 'Leng t)	۶×(-	PID Reading (PPM)	
l	vatic	eptl				Gra	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Samp very/ (fee	Penetro- meter (TSF)	P Ole P	Depth to water after drilling
ı	Ele		Descr	iption			0)	" =			Sample Recovery/Length (feet)	ш	<u></u>	Remarks
r	5	-	FILL: dark yellow	vish Brown (10YR 4/ coarse to fine sand	2)				3					
		\exists	little scrap metal, moist	trace brick, very de	nse,				14					=
	4	1—	moist			\bowtie	ss	1	50/2"		1/2		0.0	4
						₩			30/2					- 1
١	3	2				₩								
1		▏╡							8					
		<u> </u>					ss	2	44	54	1.5/2		0.0	
ļ	2	٦					33		10	34	1.3/2		0.0	=
l		▎∄	FILL: olive Gray	(5Y 4/1) to olive Blady, some medium to f	ck ine				6					4
ı	1	4	sand, little to trac loose, wet	ce brick, loose to ver	у				2					
l		7	loose, wet						3				1	
ŀ	0	5—					ss	3		7	1.5/2		0.0	Depth to water
		\exists							4					while drilling: 5' bgs -
		6							3					4
	-1		saturated						1					3
									1		4.40			
	-2		1" lens of cinders	s			SS	4	2	3	1.1/2		0.0	
		\exists							2					
35	-3	8-							2					\exists
11/8/			FILL: olive Black	(5Y 2/1) silt, some		₩₩								sheen on water
GDT	-4	9	brick, some cind dense, saturated	ers, loose to mediu	m	\bowtie	ss	5	6	10	1.1/2		0.0	
S_MO	•	Е	,				1		4					
BURN	_	10				\bowtie			1					40 42 foot
GPJ	-5	`` =				\bowtie			1					Sampled 10-12 feet _ (001) _
1204			FILL: olive Black medium to fine s	(5Y 2/1) silty clay, li and, little brick, little	ittle				6					3
RON	-6	11	cinders, stiff to v moist to wet	ery soft, low plasticit	:y ,		SS	6	4	10	1.2/2	1.0	0.0	
ERAL]	molec to wet						4					
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05	-7	12-							2					
907		=												
ENTA	-8	13-					SS	7	3	10	0.8/2	<0.25	0.0	-
MNO	-0	=							7]
ENVIR		L ∃							7					_

				iiii 19 1								
	R11r	$ns \mathcal{R}_{\tau}$	- market Market					Boring/M	lonitoring '	Well Num		B46
			Project Name Former Will	ow Street S	Station			Page		·	2 of	
	<u>VICL</u>	Jonnell	Project Number 32088					Date			11-3	0-04
	SIN	CE 1898										
÷				1			SAM	PLING				
Elevation (feet)	Depth (feet)								ŧ		gu	
٦	(fe			Graphic Log	<u>o</u> .	a e	> stage	40	Sample Recovery/Length (feet)	۵ <u>۲</u> (۲	PID Reading (PPM)	
atic	l td			Ga	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	amp /ery/ (feel	Penetro- meter (TSF)		
<u>à</u>	ے ا	5	-t4t		ιχ	ω⊆			S (0)		۵	Remarks
<u>Ш</u> -9		Desc	ription	- 			<u> </u>	-	<u>« </u>			Remarks
"	=		Very (10VD 6/2) eith	-			2					_
	=	CLAY (CL), trac	frown (10YR 6/2) silty e medium to fine sand, black silt, medium stiff,				1]
-10	15	trace lenses of b low plasticity, me	plack silt, medium stiff,		ss	8	2	3	1.2/2	1.0	0.0	_
	1 =	low plasticity, in	oist		1]
	16_						3]
-11	16-						2					Sampled 16-18 feet _ (002) -
	=						2					`` ===,
-12	17—				ss	9	~	4	1.4/2	0.75	0.0	
-12	=						2					-
	=						4					1
	18—	End of boring at	: 18 feet bgs		1							_
	-	_						i				
	10 -											
	19]
	=											
	20-											
]
	=	•]
	21—			1								
	-								ļ			1
	22				l							_
	=	1										-
	23—] -
/8/05		‡]
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<u>8</u>	24—					ļ					İ	
Š	-								1]
N. S.	=	1				1						
2	25-	1		1]
204.G	=	1]
N T	26-				İ]
필	T =											
AS AS		1										
Ü	27—	ł										
9	=	}										-
TA TA		1			1							
NME	28											1 -
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05	=	1										
ă		1			<u></u>	<u> </u>	<u> </u>	Í	<u> </u>	<u> </u>	1	

						9 -0						
	21 1 74-	200	Project Name				ct No. 32088		Borir	ng/Monito	ring Well SB47	Number
	uI.	<u>ns&</u>	Former Willow Street Coordinates	Station			32088 Elevation		Page)		
	/IcL	Donnell	• • •	E 4935.413			.77				1 of 4	
	SIN	CE 1898	Total Depth (feet) 50	Hole Size (incl 8 1/4		Driller (s) Ma	rk Natali				
Drilling	g Rig	Diedrich D120				Drilling	Company	CS D	rilling Co	ompany		
Date	12-1-0	4 To 12-1-04	Logged By: Kat	hi Wotal		Review		Jason Bla	zier	Appr	roved by:	Scott Letzel
et)	l 🙀						SAM	PLING			_	Depth to water
Elevation (feet)	Depth (feet)			್ಷಲ					Sample Recovery/Length (feet)		PID Reading (PPM)	☑ Depth to water while drilling
Ęį	돭			Graphic	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	mple ry/Le	Penetro- meter (TSF)	Re. PPI	Depth to water
) ya)ep			٥	_San Ty	Sar	ლ දි මි	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Sal Sove	Per (E E	after drilling
		Desc	ription						Rec			Remarks
	_	FILL: olive Blac	k (5Y 2/1) silt, some fir ick, some coarse to fin	ie 💥	× ×		40]				
	_	sand, trace woo	od, extremely dense, di	ў Ж	\aleph		00/4"					
6	₁ -	to moist			X ss	1	60/4"		0.8/2		0.0	_
					X							4
5	_				X							1
	2-				X-	<u> </u>						_
	_	FILL: dusky vel	lowish Brown (10YR 2/	₂₁	Š		5					
4	_ =	silty clay, little t	o trace coarse to fine	-' ***	×	ļ	7					_
	3	sand, trace bric plasticity, moist	k, hard to stiff, low		SS	2	6	13	1.5/2	4.5+	00	_
	=	,			8		5					-
3	₄				്—		3]
					8		3					_
2	=				8		4					
	5				ss	3	-	7	1.5/2	3.25	00	_
	=				×		3					_
1	=				× X		3					=
	6-	į			₩—		2					7
	-	İ			×		_					=
0		FILL: olive Blad	k (5Y 2/1) silt, slight		X		1	5	1.2/2	175	1.8	_
	'	petroleum odor sand, trace brid	, some medium to fine		SS SS	4	4	3	1.2/2	173	1.0	_
	_	Sand, trace blic	N, 10030, WC		8		4				<u> </u>	
-1	8	1			₩—	 	 	-			 	∤ ∃
/8/U2	=				8		2]
-2	=	1			×		3]
19.0 _	9-	saturated			Ss Ss	5	4	7	0.7/2		0.0]
S	=	<u> </u>			8							=
-3	J ₄₀ =	1			X		10			<u></u>		1
2	10-	1			8		5				1	sheen on water in spoon
. 204.c	=	1			X]
71 -4	11—	1			∯ ss	6	1	2	0.5/2		0.3	-
포	=	1			×		1]
-5 ERS	=				X		2					globules of
ig GE	12-	<u> </u>			\}	1				1		petroleum in water
Poc	-	pale yellowish	Brown (10YR 6/2) silty	////			1					Sampled 12-14 feet
₫ -6] =	coarse to fine s	ce black silt lenses, tra sand, medium stiff, low	~ <i>\\\\\</i>		_	1			10.05]
AE,	13-	plasticity, mois	t		ss	7	2	3	1.1/2	<0.25	2.1	
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05 L b c c c c c c c c c c c c c c c c c c	1 =	1		<i>\\\\\\</i>			2					
<u></u> -7	-			<i>\\\\\\</i>	<u>//</u>					<u> </u>	<u> </u>	

r=								Tarrac					D.47
	\mathbb{R}	uri	15 &-			·· ·			Boring/M	lonitoring '	Well Num		B47
	7	<u> </u>	$\mathbb{C}^{\mathbb{C}}$	Project Name Former Willo	w Street S	tation			Page			2 of 4	
	1	1CL	onnell	Project Number 32088					Date			12-1	-04
Ш		SIN	CE 1898										
Г	Œ.							SAM	PLING				
	Elevation (feet)	Depth (feet)			1					Sample Recovery/Length (feet)		ing	
1	چ	ر ا (Graphic Log	<u>a</u>	a e	str ici		len (t	ا في ر	PID Reading (PPM)	
	atic	pt			Gra	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	am ery (fee	Penetro- meter (TSF)	П В Ф)	
	<u>6</u>	۵	_			ιχ,	ω <u></u>	Oa	^	တ် တွေ	ď.	Δ.	Remarks
\perp	Ш			ription						<u> </u>			Terriario
		▏╡	CLAY (CL), trac	Brown (10YR 6/2) silty te black silt lenses, trace				1					-
	-8	▏ ╛	coarse to fine sa plasticity, moist	and, medium stiff, low				2					7
		15—	plasticity, moist			ss	8		4	0.9/2	1.0	0.0	ヿ
		-				1		2					
	-9	, 7						3					_
		16-						1					Sampled 16-18 feet (002)
		▏╡											-
'	-10	17				ss	9	2	4	1.2/2	0.75	0.0	\exists
ı		ا`` ∃				30	ľ	2		l]
	-11	_						4					
	-11	18-				-	<u> </u>		<u> </u>				_
1		7											_
.	-12	_ =											
		19-	nale vellowish F	Brown (10YR 6/2) silty	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>								_
			CLAY (CL), trac	ce coarse to fine sand, w plasticity, moist]
1	-13	لہرا	medium stiff, lov	w plasticity, moist									
		20-											_
		ΙŦ											- - - -
	-14	21-					 		 				-
		▎ ቯ				1		1					
	-15					1		2					_
1		22—				ss	10	,	4	1.2/2	10	0.0	_
		l d						2					_
	-16],, 7						2			<u> </u>		
305		23-				1							_
11/8		7											
<u>6</u>	-17	24				1		2]			
Q W								2	_ ا	1 7/2	0.5	0.0	-
IRNS	-18					ss	11	3	5	17/2	0.5	0.0]
E B		25—				1		3					
4.GP		-				1	<u> </u>		ļ		-		
N 120	-19	<u>, </u>									<u> </u>]
RO		26				1		2					
ERAL						1							_
GEN	-20	27				ss	12	2	5	1.7/2	0.5	0.0] -
90		l □					1	3]
JAL L	-21					1		2					
MEN	- '	28-				1	\vdash						<u> </u>
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05		-				1-	<u> </u>	<u> </u>					-
EN	-22	_ =			<i>\\\\\\</i>	ss	13	3	6	1.6/2	0.5	0.0	_

_					riiiiig i	-09							
ſ	P	urı	20 0						Boring/M	onitoring \	Vell Num	ber S	B47
-	L	ull	15 X	Project Name Former V	Villow Street S	tation			Page			3 of 4	4
	- N	1cL	onnell	Project Number 3208	8				Date	***		12-1	-04
l		SIN	CE 1898										
ľ					<u> </u>			SAM	PLING				
1	Elevation (feet)	ef)						O/AIVI	LING	£		Ď.	
1	ر) ر	Depth (feet)			일_		as —	Ø io		eug	۵.	PID Reading (PPM)	
	tio	돭			Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	mpl iry/L eet)	Penetro- meter (TSF)	~~~	
	€\e				l ^o	Sar T	Sa	Ωgg_	~ %	Sa Sove	Per	Ⅱ	
ı	Ë		Desc	ription						Sample Recovery/Length (feet)			Remarks
Ī			pale yellowish E	Brown (10YR 6/2) silty ce coarse to fine sand, w plasticity, moist				4					₫
ı			medium stiff, lov	w plasticity, moist		1	Ì				۱		-
	-23	30				SS	13	2	6	1.6/2	0.5	0.0	\exists
1		$ \overset{\sim}{} $						4					_
		▎╶╡											Ξ
ı	-24	31				<u> </u>							
								2		l .]
	-25	l ∃						2					
١		32-				ss	14	l	5	1.8/2	0.5	0.0	
1		7						3					
l	-26					1		5	1			•	
۱		33-											-
١		l ∃	medium to very	, etiff					 				-
١	-27	24-	medium to very	Suit				2]
		34				1		4					_
						ss	15		10	1.3/2	2.25	0.0	_
	-28	35						6	1		İ		
		ľ°∃				1		8	<u> </u>				_
	-29												
1	-23	36-											
١													
	-30					1							_
		37—				1							_
		╽											
	-31] _											
3/05		38				1							
11/		=	very stiff to stiff	Ī		1	 	,	1	<u> </u>]
G	-32	39	,			1		3					_
MO								6	1	4.510	4.05		=
RNS	-33					ss	16	6	12	1.5/2	1.25	0.0	_
B	JJ	40-				1		10					_
4 GP		=				1	 	''			_		-
120	-34],, =									1		
S S		41							1				_
RAL		=				1							-
JENE	-35	42-											
9		-											
AL LC	20	=											
ENT.	-36	43				1			1				
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05		=						1					_
N	-37	=											
ш		<u> </u>	L		4/////								

F					9	<u> </u>	<u></u>		Dorina /A	onitoring	سبنا الما	her S	B47
	В	uri	ns & z	Project Name Former Willo	w Street S	Station			Page	toriitoring	vven Num	4 of	
	$\overline{\lambda}$	$\frac{1}{1}$	onnell	Project Number 32088	W Olleet C	nation			Date			12-1	
l	ΤΛ	SIN	CE 1898	1 Toject Namber 62000					Date				
ľ	\overline{a}	3111	01 1070		<u> </u>	<u> </u>		S A M	L IPLING				
	eet	et)						- SAIVI	T	£	<u> </u>	ق ا	
	Elevation (feet)	Depth (feet)			Graphic Log	υ	<u></u>	رئ تې تې		Sample Recovery/Length (feet)	ۇ <u>ي</u> ا ر	PID Reading (PPM)	
	atic	-pt			Gia C	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	yery/ (feet	Penetro- meter (TSF)	모면	
	<u>[6</u>	ا ۵	Doco	ription		Ω,	ω=	0 0	_	Social	<u> </u>	<u> </u>	Remarks
┢	<u>"</u>				777777					<u> </u>	-		
		╡	CLAY (CL), trac	Brown (10YR 6/2) silty the coarse to fine sand, asticity, moist									
ı	-38	٦ <u>.</u> ٦	very stiff, low pie	asticity, moist				4]
ı		45						6					
ı	-39	F				SS	17	9	15	1.5/2	2.75	0.0	<u> </u>
	-59	46-						12					=
		$ $ \exists				_		14					1 1
	-40	47 					1						
١	l	"′∃											
ı	-41	\vdash											
ı	T'	48—_											
		\exists						3					
۱	-42	49				SS	18	6	15	1.6/2	2.5	0.0]
		48 _				33	'0	9	13	1.0/2	2.5	0.0	
ı	-43	\exists						12					
	-43	50-	End of boring at	t 50 feet bas	_//////	1—						 	
		\exists		· ·									
١		51 											_
ı		ן ∃											
1		52											
										İ			
		53]
1/8/05													1
		=]
δ G		54—											-
SNS		=				1]
BE		55 -											1 -
4.GP,						1	1						
120]
<u>8</u>		56 				1]
ERAL		=											\exists
GEN		57—]
200		=			-]
ĬĀ													3
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS MO.GDT 11/8/05		58—]
VIRO N		=											7
äL		_				1	1	<u> </u>					

N	1cD sinc	onnell	Former Willow Street Coordinates N 5290.74 E				Ground	32088		Page		SB48	
IV	SINC		N 5290.74 E		100					"""		1 of 2	
				Hole Size	e (inche	s)	Driller (s	19	rk Natal	L			
	ı Ria I		20		8 1/4					rilling Co	ompany	,	
Drilling		Diedrich D120						Company					Scott Letzel
	11-30-0	4 то 11-30-04	Logged By: Katl	hi Wota	al T		Reviewe		Jason Bla	zier	Appr	oved by:	OCON LEGZEI
Elevation (feet)	ef)				ł			SAIVI	PLING	£		g _u	Depth to water
E	Depth (feet)				Graphic Log	e e	a e	۸ ۱.5'	ø)	ole /Leng t)	ا تو (ر. م	PID Reading (PPM)	
/atic	eptt				Gra	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Samp very (fee	Penetro- meter (TSF)	9. P.	Depth to water after drilling
□ □		Descrip	otion							Sample Recovery/Length (feet)			Remarks
6	\exists	FILL: dusky yellow	vish Brown (10YR 2/ vel, some silty clay,	2)				2					
	=	little roots, little cir medium dense to	nders, trace brick,		₩	:		7					=
5	1-	mediam dense to	1000, moiot		\ggg	SS	1	14	21	0.5/2		0.0	\exists
	. 7				\ggg			10					=
4	2—]				****			5					コ
	=			Į.	****								3
	3				****	SS	2	8	13	1.4/2		0.0	-
3	7				****			5					-
					XXX			6					_
2	7 🖠				****			4					\exists
	_ =				XXX			6		4.4/0			_
1	5-				XXX	SS	3	3	9	1.1/2		0.0	=
	E				\ggg			2					_
0	6-				\ggg			1					
	1	FILL: pale yellowi	sh Brown (10YR 6/2					1					_
-1	7-	silty clay with som medium to fine sa	ne black mottling, littl Ind, little wood, trace	e :	XXX	ss	4	,	2	0.9/2		0.0	
-'	∃	cinders, trace brid plasticity, moist	ck, soft to very soft, lo	ow	XXX								=
	8				XXX		<u> </u>	2					Sampled 8-10 feet
-2	=							1					(001)
1 TO	E, l				****	ss	5	1	2	1.6/2	0.5	0.0	_
-3	"				XXX	33	"	1		1.0/2	0.0	0.0	_ _
JRNS	=				\ggg			2					
18 -4	10-				XXX			3					<u>-</u> -
204.G	\vdash							9					_ _
-5	11—	FILL: yellowish Bi olive Black (5Y 4/	rown (10YR 6/2) to ′1), trace to little bricl	k	\ggg	SS	6	3	12	1.3/2	<0.25	0.0	
ERAL I								3					
GENE	12				\bowtie			 				<u> </u>	 -
-6	\vdash				\bowtie			2					_
ENTAL	₁₃					ss	7	1	2	1.9/2	<0.25	0.0	
ENVIRONIMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05	<u>`</u>				\bowtie			1					-
ENVIR	=		1000		\bowtie			1					

	R	rrr	ns l						Boring/M	onitoring \	Vell Numl		B48
H				Project Name Former Willow	v Street S	tation			Page			2 of 2	
H	IV	1CL	onnell	Project Number 32088			···		Date			11-3	0-04
L		SIN	CE 1898						51.11.10				
	Elevation (feet)	Depth (feet)		ription	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	PLING Nalue	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
	-8		FILL: pale yellow olive Black (5Y 4	vish Brown (10YR 6/2) to 4/1) silty clay with some	\bowtie			2					=
	-9	15	black mottling, li little wood, trace	ttle medium to fine sand, cinders, trace to little low plasticity, moist		SS	8	1 1 1	2	0.7/2	<0.25	0.0	- - - - -
	-10	16	pale yellowish B	frown (10YR 6/2) silty				1					
	-11	17-	CLAY (CL), trac very soft, low pla	brown (10YR 6/2) silty e coarse to fine sand, asticity, moist		SS	9	1 1 1	2	1.4/2	0.25	0.0	-
	-12	18 						1					Sampled 18-20 feet (002)
	-13	19-				SS	10	2	3	2/2	<0.25	0.0	- - - - -
		20	End of boring at	20 feet bgs									
		21-											
		22-											- - - -
9/05		23 <u> </u>											- - -
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05		24 											-
GPJ BURN		25— —											- - - - -
AL IRON 120.		26 -											- - - - -
OG GENER		27— =											-
ONMENTAL L		28											-
ENVIR												<u></u>	_

							<u> </u>						
	21122	20.0	Project Name				Projec	t No. 32088		Borin	g/Monitor	ring Well SB49	Number
	Buri	15 (Former Willow Stree Coordinates	et Station				SZU88 Elevation		Page			
$\parallel \Lambda$	/IcD	onnell	N 5254.403	E 4936.3	31			68				1 of 2	
	SINC	TE 1898	otal Depth (feet) 16	Hole Size	(inche 3 1/4	s)	Driller (s	s) Mai	rk Natali				
Drillin	a Ria	Diedrich D120	10		<u> </u>		Drilling	Company	CS D	rilling Co	mpany		
	11-30-0		Logged By: Ka	thi Wotal			Reviewe		Jason Bla	zier	Appr	oved by:	Scott Letzel
		74 10 11-30-04	Loggod By. 14d	T T T T T T T T T T T T T T T T T T T	T	L			PLING				
Elevation (feet)	Depth (feet)	Descri	ption		Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	☐ Depth to water while drilling ☐ Depth to water after drilling ☐ Remarks
6	1	silt, some fine gra	vish Brown (10YR 2 vel, little coarse to f trace cinders, loose	ine 🔯		SS	1	2 4 4 3	8	0.7/2		0.0	- - - - - - - - - - - - - - - - - - -
4 3	3 -	Poor recovery due material	e to matrix of Fill			ss	2	7 5 7 7	12	0/2			- - - - - - - - -
2	5	FILL: dusky yellov silt, some fine gra fine sand, loose, i	wish Brown (10YR 2 tvel, some coarse to moist	2/2)		SS	3	4 5 4 4	9	1.3/2		0.0	
0 -1	7—	Ell L: dark vellow	ish Brown (10YR 4/	<u></u>		SS	4	2 2 3 4	5	1.4/2	1.0	0.0	
JRNS MO.GDT 11/8/05	9	silty clay little me	dium to fine sand, um stiff to very soft,	×		ss	5	2 2 2 2	4	2/2	1.0	0.0	Sampled 8-10 feet (001)
NERAL IRON 1204.GPJ BU	10					SS	6	WOH 1 1 1	2	1.1/2	<0.25	0.0	WOH = weight of the hammer
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05 L	13-13-1	CLAY (CL), trace	own (10YR 6/2) silty black silt lenses, tr nd, very soft to soft,	ace 🏏		SS	7	2 2 1 1	3	1.4/2	<0.25	0.0	- - - - - - -

			11111119 1	9							5.46
	Buri	ns 9_					Boring/M	onitoring \	Vell Num		B49
<u> </u>		Project Name Former W	/illow Street S	Station			Page			2 of :	
	/lcL	Onnell Project Number 32088	3				Date			11-3	0-04
	SIN	CE 1898									
<u></u>						SAM	PLING				
Elevation (feet)	(g		İ			<u> </u>		£		D _U	
C	Depth (feet)		Graphic Log	o o	υ _π	5.53		el (ہٰ۔ ؍	PID Reading (PPM)	
읉	듄		Jrap Lo	Sample Type	Sample Interval	Blow Counts per 0.5'	Value	amp ery/l	Penetro- meter (TSF)	P.P.	
e e			١	Sa⊤	SΣ≣	-08	>	Sample Recovery/Length (feet)	a - C	Ы	Damanka
団		Description	- W.////					<u> </u>			Remarks Sampled 14-16 feet _
	l∃	pale yellowish Brown (10YR 6/2) silty CLAY (CL), trace black silt lenses, trace coarse to fine sand, very soft to soft, low				1					(002)
-8	-	coarse to fine sand, very soft to soft, low				1					_
	15	plasticity, moist		ss	8		2	1.8/2	0.5	0.0	_
				1		1					
-9	ΙI			1		1					
	16-	End of boring at 16 feet bgs									_
	17—										-
	''=										
	1 7										_
	18-										
	1 7							1			
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	19]
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	20-]
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	21—]
	=						1				_
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	22-										_
	=							1]
	23—						İ		E]]
8/05											
7	_										1 1
<u>G</u>	24—		1								
WC W	=										
S. S. S. S. S. S. S. S. S. S. S. S. S. S	=					I			1]
2 <u>a</u>	25										
2 2 2	=										-
N 12	26										
8	-										
ERAI	=										
GEN	27—										=
90	=										1 =
TAL	=]
MEN	28—	1									_
ENVIRONMENTAL LOG. GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05	=	1		1							-
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	Burns & Project Name Former Willow Street Station						Proje	ct No. 32088		Borir	ng/Monito	ring Well SB49E	
	/cD	onnell	Coordinates	E 4940			Ground	Elevation 97		Page	•	1 of 2	
	SIN	CE 1898			ze (inche 8 1/4	es)	Driller (s		rk Natali	1			
Drilli	ng Rig	Diedrich D120	10		0 11-1		Drilling	Company	CS D	rilling Co	ompany		
Date	12-2-04	4 то 12-2-04	Logged By: Ka	thi Wo	tal		Review	ed by:	Jason Bla	zier	Арр	roved by:	Scott Letzel
) (je	T F						·	SAM	PLING	<u> </u>		, n	Denth to water
Elevation (feet)	Depth (feet)				Graphic Log	<u>o</u>	ale	v Its .5.		Sample Recovery/Length (feet)	6 25 (-	PID Reading (PPM)	
vatic	ept				Grag	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Samp overy/ (feel	Penetro- meter (TSF)	PID R (PI	Depth to water after drilling
Ele		Descri								Rec			Remarks
	=	Advanced augers location to collect bgs (SB49B-001)	sample at 14-16 fee	et									=
6	1-4	bgs (Sb49b-001)											
													=
5	2												
	1 3												1
4	3-												=
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3	4-												=
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2	5-												크
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11 11													<u>-</u>
G5 -2	9 -												
ORNS ORNS													=
GPJ BU	10-												=
4 1204 1204	11_						-						=
A IN	9 10 11 12 12]
SENER 5- SENER													_
901	12 -												
-6	13-												=
ENVIRONMENTAL LOG GENERAL IRON 1204, GPJ BURNS_MO.GDT 17805 9 G													
Ž L	_					<u> </u>	<u> </u>				<u> </u>	1	_

	\overline{R}	1111	$ns \mathcal{R}_{\tau}$						Boring/M	onitoring	Well Num		B49B
	$\frac{\mathcal{L}}{\mathcal{N}}$		on nell	Project Name Former Willo Project Number 32088	w Street S	Station			Page			2 of 12-2	
	ΣV	SINC	E 1898	F10ject Number 32000					Date			12-2	<u> </u>
Ę	· T	ì						SAM	IPLING				
Flevation (feet)	בוסימנוסוו (וסכ	Depth (feet)	Desci	ription	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
		15	pale yellowish B CLAY (CL), trac very soft, low pla	irown (10YR 6/2) silty e coarse to fine sand, asticity, moist		SS	1	WOH 1 1 1	2	1.6/2	<0.25	0.0	Sampled 14-16 feet bgs (001) WOH = weight of the hammer
		16————————————————————————————————————	End of boring at	16 feet bgs		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							-
		18											-
		19											
		20— — — —											-
		21—											-
35		23-											-
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS MO.GDT 11/8/05		24											
04.GPJ BURN		25 =											- - - - -
IERAL IRON 12		26 											
TAL LOG GEN		27—											
ENVIRONMEN		28 - - -											-

SAMPLING	Approved by	: Scott Letzel
Drilling Rig Diedrich D120 Date 11-29-04 To 11-29-04 Logged By: Kathi Wotal Total Depth (feet) 8 1/4 Driller (s) Mark Natali Driller (s) Mark Natali Drilling Company CS Drilling Comp Reviewed by: Jason Blazier SAMPLING	any Approved by	: Scott Letzel
Date 11-29-04 To 11-29-04 Logged By: Kathi Wotal Reviewed by: Jason Blazier SAMPLING	Approved by	
SAMPLING		
	SF) Reading PPM)	
	SF) Reading PPM)	Donth to water
Graphic Log Sample Interval Blow Counts per 0.5' Blow (feet)	[6] 사람	Depth to water while drilling
Sample Interval Blow Counts per 0.5' Nalue Sample Counts per 0.5' Penetro-marker Penetro-marker Penetro-marker Penetro-marker Penetro-marker Sample Counts per 0.5' Penetro-marker Penetro-Marker Penetro		Depth to water after drilling
Blow Counts per 0.5' Value Recovery/Length Penetro- meter per 1.0 Penetro- meter per 1.0 Penetro- meter per 1.0 Penetro- meter per 1.0 Penetro- meter per 1.0 Penetro- meter per 1.0 Penetro- meter per 1.0 Penetro- meter per 1.0 Penetro- per 1.0 Penetro- penetro- per 1.0 Penetro- pen	<u> </u>	Remarks
FILL: dark vellowish Brown (10YR 4/2)		
sand, some cinders, little fine gravel,]
5 1— Intitle lubber scrap, dense, moist ss 1 33 1.4/2		-
	171	=
4 2 -		┨
3 3 FILL: dark yellowish Brown (10YR 4/2) SS 2 6 18 1.2/2	5.1	
brick, medium dense, moist]
		፟
2 4 1 6 6] =
FILL: dark yellowish Brown (10YR 4/2) 7		∳ ‡
1 5— some coarse sand, some fine gravel, some silt, little brick, medium dense, SS 3 7 14 1/2	0.0	\exists
saturated 12		
The state of the s]
-1 7— coarse to fine sand, some shell fragments, medium dense, saturated sst 4 1 0.7/2	0.0	
		-
FILL: olive Gray (5Y 4/1) silty clay with 3	ŀ	
black mottling, little to trace coarse to fine sand, trace cinders, soft to very soft, 9 SS 5 2 0.9/2	0.0	1 4
low plasticity, moist strip solving ss 5 2 0.9/2	0.0	
]
		Sampled 10-12 feet
	154	`
$\begin{bmatrix} -5 & 11 \\ -2 & \end{bmatrix}$ $\begin{bmatrix} -5 & 11 \\ -2 & \end{bmatrix}$ $\begin{bmatrix} -5 & 11 \\ -2 & \end{bmatrix}$ $\begin{bmatrix} -5 & 11 \\ -2 & \end{bmatrix}$ $\begin{bmatrix} -5 & 11 \\ -2 & \end{bmatrix}$ $\begin{bmatrix} -5 & 11 \\ -2 & \end{bmatrix}$ $\begin{bmatrix} -5 & 11 \\ -2 & \end{bmatrix}$ $\begin{bmatrix} -5 & 11 \\ -2 & \end{bmatrix}$.5	_
	1365]
₩ -6 12—]		WOH = weight of
T lens petroleum coated, petroleum	6.5	the hammer –
-7 13 -7 -7 13 -7 -7 -7 -7 -7 -7 -7 -	.25	
FILL: olive Gray (5Y 4/1) silty clay with black mottling, little to trace coarse to fine sand, trace cinders, soft to very soft, low plasticity, moist 1	345	
	345	-

I	21111	$ns R_{\tau}$					-	Boring/M	onitoring \	Nell Numb	oer S	B50
			Project Name Former Willov	w Street S	Station			Page			2 of 4	
	/ICL	onnell	Project Number 32088					Date			11-2	9-04
	SIN	CE 1898						<u></u>				
Elevation (feet)	Depth (feet)	Desci	ription	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	PLING Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
-9	15—	olive Gray (5Y 4	/1) silty CLAY with dark ining, strong petroleum se to fine sand, trace		ss	8	3 1 2	3	1.6/2	0.5	589	Sampled 14-16 feet (002), sheen on water
-10	16-						1				930	
-11	17—	CLAY (CL), trac	rown (10YR 6/2) silty e black silt lenses, trace and, medium stiff to very ty, moist		SS	9	1 1 2 3	3	1.3/2	0.75	0.0	-
-12	18					40	1 2		4.2/2	0.75	0.0	-
-13 -14	19 -				SS	10	2 2	4	1.2/2	Q75	0.0	Sampled 20-22 feet
					ss	11	1 1 1	2	1.3/2	<0.25	0.0	(003) – –
-16	22— - - - 23—	CLAY (CL), trac	Brown (10YR 6/2) silty te coarse to fine sand, very soft, low plasticity,									-
-17 -18 -18	24 -	moist	ic., soil, icit placticity,				1 2					-
-19 -19 -19 -19 -19 -19 -19 -19 -19 -19	25				SS	12	3 2	5	1.8/2	<0.25	0.0	- - - - -
-20	26-						1					
ENVIRONMENTAL LOG GENERAL IKON 1204-643 BOKNS MOLGD 1 178000 CENERAL	27—				SS	13	2 2 3	4	1.5/2	<0.25	0.0	-
-22	28				-				1.9/2	0.75	0.0	
<u> </u>				VIIIII	ss	14	2	6	1.3/2	0.75	0.0	

П	D	2	26.0				· · · · · · · · · · · · · · · · · · ·	T		onitoring \	Nell Numl	ber S	B50
I	D	uri	15 & P	roject Name Former Wi	llow Street S	tation			Page			3 of 4	4
	N	<u> Icl</u>		roject Number 32088					Date			11-2	9-04
		SIN	CE 1898										
Γ	et)	Œ						SAM	PLING				
	Elevation (feet)	Depth (feet)	Descrip	tion	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
r		\exists	pale yellowish Brow CLAY (CL), trace o very stiff, low plasti	vn (10YR 6/2) silty				3	•				
	-24	30-	very stiff, low plasti	city, moist		SS	14	3 4	6	1.9/2	0.75	0.0	_
	-25	31—											
	-26	32 32											
	-27	33— 33—								-			- - - - -
	-28	34-						5					<u>-</u> -
	-29	35— - -				SS	15	7 9 12	16	0/2			-
	-30	36	very stiff stiff					6					 - - - -
	-31	37 <u> </u>				SS	16	11	19	1.5/2	1.75	0.0	
11/8/05	-32	38 						13					
NO.GDT	-33	39 <u> </u>	stiff to very stiff					4					
04.GPJ BURN	-34	40				ŞS	17	7 11	18	1.7/2	4.5	0.0	
RON 12	-35	41— =						14					<u>-</u>
LOG GENEF	-36	42 <u> </u>											
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05	-37	43 											-

Burns & Project Name Former Wi									Boring/M	lonitoring \	Vell Num		B50
H	7				v Street S	Station			Page			4 of	
	IV	TCL	CE 1898	Project Number 32088					Date			11-2	9-04
L	(2114	CE 1090					SAM	PLING				
i	Elevation (reet)	Depth (feet)	Desc	ription	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
			pale yellowish B	Brown (10YR 6/2) silty be coarse to fine sand, asticity, moist				5	•				
	39	45 	very stiff, low pla	asticity, moist		SS	18	8 11 14	19	1.4/2	2.25	0.0	- - - - - - -
	40	46											
	41	47— —						i.					
	42	48 						4					-
	43	49 - -				SS	19	13 14	21	1.6/2	3.5	0.0	
		50	End of boring at	50 feet bgs	<i>(///////</i>								- - -
		51 											
		52 =											-
1/8/05		53-											- - - -
MO.GDT 1		54 											= = = = = = = = = = = = = = = = = = = =
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05		55 =											<u>-</u>
L IRON 1204		56 <u> </u>											- - -
G GENERA		57 <u> </u>											
MENTAL LC		58 <u> </u>											-
ENVIRON													- - - -

R	arr	$ns R_T$	Project Name Former Willow Stree	at Station			-	ct No. 32088		Borir	ng/Monito	ring Well SB51	Number
	$\frac{\sqrt{an}}{\sqrt{a}}$		Coordinates				Ground	I Elevation		Page 1 of 2			
IV		E 1898	N 5163.152 otal Depth (feet)		ize (inche	es)		5.50 1 of 2 Oriller (s) Mark Natali					
			20		8 1/4					rilling Co	mnany		
Drilling		Diedrich D120						Company					Scott Letzel
	12-1-04	То 12-1-04	Logged By: Ka	thi Wo	tal		Review		Jason Bla		Appi	roved by:	SCOR Leizer
Elevation (feet)	(je						<u> </u>	SAIVI	PLING			В́г	
) uc	ر (fe				Graphic Log	e e	ज ह	۸ انځار	σ.	ole /Leng t)	-pric	teadii PM)	while drilling
vatic	Depth (feet)				Gra	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Samp overy (fee	Penetro- meter (TSF)	PID Reading (PPM)	Depth to water after drilling
Ele		Descrip	otion			3				Sample Recovery/Length (feet)			Remarks
	\exists	FILL: dusky yellow silt. some coarse t	vish Brown (10YR 2 to fine sand, trace fi	2/2) ine				9					=
5	4	gravel, trace brick plastic debris, den	, trace cinders, trac	е				29					=
		plactic accinc, acin	ioo, ary to moiot			SS	1	20	49	2/2		0.0	\exists
4	╡							19					_
	2—							22					
3	=												1
	3	olive Black (5Y 2/	1)			SS	2	11	17	1.2/2		0.0	- コ
2	3	Olive Black (31 2/	'')					6					
								5					
								3					7
'	┆┋	FILL: dark yellowi	sh Brown (10YR 4/2	 2)				5		0.0/0	0.05		\exists
	\Box	sand, trace cinder	s, very stiff to very	iiie		SS	3	7	12	0.9/2	2.25	0.0	<u>-</u>
0		soft, low plasticity	, moist to wet					9					= = =
	6							1					\exists
-1								1					_
	7—]					ss	4		2	1/2	0.5	0.0	=
-2	╛												- -
	8_					<u> </u>		2					\exists
-3	\exists					1		2					
	E _e					ss	5	1	3	0.8/2	<0.25	0.0	=
-4						00	ľ	2		0.0.2	•		=
T.	<u>ار ا</u>							4				7	7
	10-							3					Sampled 10-12 feet _ (001) _
-5		FILL: black (N1) s product, strong ta	r odor, some fine					3				11.1	Most of sample was – free product with
S S	11—	gravel, soft to very saturated	y soft, low plasticity	,		SS	6	4	7	1/2			some to little water
-6								3				24.2	_
	12—							1					
-7	╽╶╡											15	-
	13-					ss	7	1	2	1.2/2]
2 - 4 - 5 - 6 - 7 - 8	E							1				23.5	
2					<u> </u>	1		1	<u> </u>	<u> </u>	<u> </u>		

-13 -14 -14 -15 -16 -17 -18 -19 -19 -19 -19 -19 -19 -19 -19 -19 -19		311r	ns l					Boring/Monitoring Well Number SB51					
SINCE 1898 SAMPLING SAMPLIN		Project Warner Former Willo				Station							
Company Comp		/ICL SIN	CE 1898	Project Number 32088					Date			12-1	-04
Upper Age of the product of the prod		3111	CE 1000		<u> </u>			MAS	DLING				
-9 FILL: black (N1) silty clar free product, strong tar odor, some fine gravel, soft to very soft, low plasticity, saturated SS 8 4 8 0.6/2 6.7 -10 16 No Recovery, wood blocking shoe 2 3 3 0/2 -11 17	Elevation (feet	Depth (feet)	Desc	ription	Graphic Log	Sample Type	Sample Interval			Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
16 No Recovery, wood blocking shoe 17 SS 9 1 3 0/2 18 pale yellowish Brown (10YR 6/2) slity CLAY (CL), trace coarse to fine sand, very soft, low plasticity, moist 19 End of boring at 20 feet bgs 21 2 3 1 3 0/2 3 1 2 0.9/2 <0.25 0.0		15—	FILL: black (N1) product, strong gravel, soft to ve saturated) silty clay, tar free tar odor, some fine ery soft, low plasticity,		SS	8	4				6.7	-
17— 18— ————————————————————————————————		16-	No Recovery, w	rood blocking shoe						· · · · ·			
-13 1		-				SS	9	2	3	0/2			-
20 End of boring at 20 feet bgs 21 22			pale yellowish B CLAY (CL), trac very soft, low pl	Brown (10YR 6/2) silty se coarse to fine sand, asticity, moist		SS	10	1	2	0.9/2	<0.25	0.0	Sampled 18-20 feet
22—1 23—1 23—1 24—1 24—1 25—1 25—1 25—1 25—1 25—1 25—1 25—1 25		20 =	End of boring at	t 20 feet bgs				1					or sample
		21—											
23—1 23-1 24-1 1-1 25		22—											- - - -
24—1 24—1 25—1 1 25—1 1 26—1 1	8/05	23— =											
25 - 1 25 - 1 1 1 200 (25) 1 1 1 1 200 (25) 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	S MO.GDT 11.	24— -											-
26—1 1 26—1 1 1 1 1 1 1 1 1 1 1	04.GPJ BUR	25— -											
	RAL IRON 12	26 <u>-</u>											
	L LOG GENE	27—											
28— 28— 28— 28— 28— 28— 28— 28— 28— 28—	VIRONMENTA	28											

	R	11rr	$rs \mathcal{R}_{\tau}$	Project Name Former Willow Stree	et Station			Proje	ct No. 32088		Borir	ng/Monito	ring Well I SB51		
	$\frac{\mathcal{L}}{\mathcal{N}}$	<i>r</i> 7	onnell	Coordinates N 5161.924				Ground	Elevation		Page	Page 1 of 2			
	1 V		V	Total Depth (feet)		ze (inche 8 1/4	es)	Driller (s) Jaime Favela							
Di	rilling	Rig [Diedrich D120					Drilling	Company	CS D	rilling Co	ompany			
D	Date 12-3-04 To 12-3-04 Logged By: Kathi W							Review	ed by:	Jason Bla	zier	Аррі	oved by:	Scott Letzel	
-	et)	£							SAM	PLING				Death to contain	
;	n (fe	(fee				hic 3		n =	2, 8		e .ength	ا اه، ح	ading M)	☑ Depth to water while drilling	
:	Elevation (feet)	Depth (feet)				Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	sampl very/L (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Depth to water after drilling	
i	E le	ا ۵	Descr	iption			S.	0 =			Sample Recovery/Length (feet)	а.	4	Remarks	
	5	彐	Advanced augers	s to 10 feet bgs to ample - not analyzed	d.										
	١	3	CONCOC DIW II E OC	ampio not analyzot											
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	-2	=													
55		8												=	
11/8/	-3														
O.GDT		9-												_	
NS M	-4														
J BUR		10	FILL: olive Gray	(5Y 4/1) silty clay w	ith	****			1						
204.GP	-5	_	black mottling, lit	ttle to trace coarse to glass, trace brick,	0									=	
SON 12		11—	medium stiff, low	v plasticity, moist to	wet		ss	1	1	4	1.7/2	0.75	1.1		
RAL	-6	=							3				7	}	
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS MO.GDT 11/8/05		12-	saturated				-		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					water and tar in split	
1 LOG	-7	I∃							WOH					spoon 12-18 feet — bgs —	
JENTA		13-					ss	2	2	3	0.6/2		17.8	WOH = weight of the hammer	
TRON	-8	E							1 1						
Ä_	=					<u> </u>	<u> </u>	<u> </u>	<u> </u>	L		<u> </u>			

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	\mathbb{P}	1111	ns &					Boring/M	onitoring	Well Num	_{ber} S	B51A
	با	ull	Project Name Former Willo	w Street S	Station			Page 2 of 2				
	\mathcal{N}	1cE	Onnell Project Number 32088					Date			12-3	-04
l	~ '	CINIS	CE 1898									
	-	3111	CL 1070	1								
1	((£					SAM	PLING				
;	Elevation (feet)	Depth (feet)							Sample Recovery/Length (feet)		PID Reading (PPM)	
	ᇹ) H		l g g	<u>9</u> 0	ब्र	nts	۰	Pe €	ដូចជ	Sea PM	
;	j j	ept		Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	Value	lee (fee	Penetro- meter (TSF)	П. П.	
١.	<u>@</u>	۵	-		N.	sΞ	""	_	၂ က စွ်	Δ.	α	Remarks
Ľ	<u> </u>		Description	XXXXX		<u> </u>			<u>«</u>			Nemains
	-9	╛	nole vellowich Brown (10VP 6/2) silty	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	1		WOH	']
	Ĭ	-	pale yellowish Brown (10YR 6/2) silty CLAY (CL), trace coarse to fine sand, medium stiff to soft, low plasticity, moist				1					
		15-	medium stiff to soft, low plasticity, moist		ss	3	'	2	1/2	0.75	20.6]
_	10						1]
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		16			1			 				-
_	11	l ⊐			1	1	WOH]]
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		17—			ss	4	i '	2	1.2/2	0.5	3.7	_
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	-						1]
		18-	End of boring at 18 feet bgs		1—			 	ļ	1		
			Life of borning at 10 feet bgs									_
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ENVIRONMENTAL LOG GENERAL IRON 1204,GPJ BURNS_MO.GDT 11/8/05												-
Ξ N				<u> </u>	<u></u>	<u> </u>			<u></u>	<u> </u>	<u> </u>	

Coordinates N 5184.141 E 4962.544 Fotal Depth (feet) 18 10 f 2		R	lirr	100	Project Name Former Willow Street St	tation			ct No. 32088		Borir	ng/Monito	ring Well SB51	
Total Depth (New) Hole Size (Inches) Brilling Rig Diedrich D120 Drilling Rig Diedrich D120 Drilling Rig Diedrich D120 Drilling Company CS Drilling Company		$\frac{1}{\lambda}$	$\frac{\sqrt{am}}{\sqrt{aD}}$	$\frac{10}{\text{cm}}$	Coordinates			Ground	l Elevation		Page)		
Date 12-3-04 To 1	ŀ	10	SINC	F 1898	otal Depth (feet) Ho	ole Size (inch				me Fave			1012	
Date 12-3-04 To 12-3-04 Logged By: Kathi Wotal Reviewed by: Jason Blazier Approved by: Scott Letzel SAMPLING Sampling Depth to was after drilling Remarks Depth to was after drilling Remarks Some state of the state o					18	8 1/4						ompany		
SAMPLING SAMPLI	-				Lawred Buy Kathi	\\/						I		Scott Letzel
Description Descr	-		12-3-04	To 12-3-04	Logged By: Kathi	vvotai		Review			2161	App	lovea by.	
Blind drilled to 12 feet bgs to collect DNAPL sample - not analyzed.		(feel	eet)						<u> </u>		gth		ing	Depth to water
Blind drilled to 12 feet bgs to collect DNAPL sample - not analyzed. 3		ion	th (f			aphic -og	e pe	rple val	ow Ints 0.5	eg l	nple y/Len et)	etro- iter SF)	Read PPM)	
Blind drilled to 12 feet bgs to collect DNAPL sample - not analyzed. 3		evat	Dep			<u>0</u>	Sam	San	E S E	<al> Aal </al>	San cover (fe	Pen (T)	OF OF	
5	\perp										Ř			Remarks
Water encounter while drilling at 10 feet bgs 10		5	1	DNAPL sample - I	not analyzed.									
3 3 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1											
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		-1	E											=
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Water encountern while drilling at 11 feet bgs 10		-2]											_
Water encountern while drilling at 10 feet bgs FILL: olive Black (5Y 2/1) silt, little coarse to fine sand, little to trace fine gravel, trace wood, very loose, saturated SS 1 2 2/2 1.3	22		8-											
Water encounter while drilling at 10 feet bgs 11— 12— FILL: olive Black (5Y 2/1) silt, little coarse to fine sand, little to trace fine gravel, trace wood, very loose, saturated 3 gravel, trace wood, very loose, saturated 13— 13— SS 1 1 2 2/2 1.3	11/8/(-3												-
Water encounters while drilling at 16 feet bgs 11	GDT		9											
Water encounter while drilling at 1st feet bgs 10	NS M	-4												- -
while drilling at 10 feet bgs 11— 12— FILL: olive Black (5Y 2/1) silt, little coarse to fine sand, little to trace fine gravel, trace wood, very loose, saturated SS 1 2 2/2 1.3	BUR		10										<u> </u>	7 Water encountered
THE NOW THE NOW THE NAME OF TH	94.GP,	-5												while drilling at 10 -
THE TOTAL TO	ON 12(11—											
The state of the s	AL R	-6												-
The product if the pr	SENE		12-	Ent. P. B.	(5V 0/4) -:!k !!!!-	XXXX	\perp							tar free product in
gravel, trace wood, very loose, saturated ss 1 1 2 2/2 1.3	907	-7		coarse to fine san	id, little to trace fine	. 💥	×		3					water -
░ l'´-l	NTAL		13-	gravei, trace wood	u, very loose, saturated	· 💥	×	1	1	,	212		13	
[-8 -	ONWE	-8	``‡				"	'	1		212			-
	ENVIR		=						1					

	311r1	$ns R_{\tau}$	100					Boring/Monitoring Well Number SB51B				
		Opposit	Project Name Former Willow	v Street S	station			Page 2 of 2 Date 12-3-04				
1	/ICL	CE 1898	Project Number 32088					Date			12-3	-04
	3110	CE 1090					SAM	PLING				
Elevation (feet)	Depth (feet)	Desc	ription	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
-9 -10	15—	pale yellowish B CLAY (CL), trac soft to very soft,	Brown (10YR 6/2) silty e coarse to fine sand, low plasticity, moist		SS	2	WOH WOH	•	1.6/2	0.25	10.7	tar smear on outside of clay sample 13.6-18 feet bgs WOH = weight of the hammer
-10	16-						2					
-11	17— -				SS	3	1 1 1	2	17/2	<0.25	14	
	18— — — — 19—	End of boring at	: 18 feet bgs									- - -
	20											
	21—											
	22—											-
11/8/05	23-					; ;						
NS_MO.GDT	24											
204.GPJ BUR	25 <u> </u>							_				
RAL IRON 12	26 - - - -											
IL LOG GENE	27—											
ENVIRONMENTAL LOG GENERAL IRON 1204. GPJ BURNS_MO.GDT 11/8/05	28 - - - - -											-

ſi	D		200	Project Name			Ī	Proje		 -	Borir	ng/Monito	-	Number		
ļ	_ <u>b</u>	Former Willow Street State Coordinates Coordinates					Ground Elevation					SB52				
	N	<u> 1cD</u>	onnell	N 5156.42 E					.34			1 of 2				
		SINC	E 1898	Fotal Depth (feet) 14	Hole Si	ze (incho 8 1/4										
	Orilling	ı Rig	Diedrich D120					Drilling	Orilling Company CS Drilling Company							
[Date '	ate 12-2-04 To 12-2-04 Logged By: Kathi W						Review	ed by:	Jason Bla	zier Approved by			Scott Letzel		
r	क्रि	⊕ I							SAM	PLING						
	Elevation (feet)	Depth (feet)				U					Sample Recovery/Length (feet)		PID Reading (PPM)	Depth to water while drilling		
	tion) th				Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	mple ry/Le set)	Penetro- meter (TSF)	Rea (PPN	Depth to water		
	eva	De l				٥	Sar	Sar	<u>ლ</u> გ გ	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Sa cove	Per T)	PIC	after drilling		
L	Ш		Descri	iption approximately 5 fe	ot .	××××					<u> </u>			Remarks		
	6	4	bgs by test pitting	approximately 5 let	Ci	\bowtie			2					=		
l		E				\bowtie			9	15	1/2		8.7	_		
	5	'=				\bowtie	SS	1	6	15	172		0.,			
		╛				\bowtie			6					=		
	4	2				\bowtie			3							
	- "	7				\bowtie			4					_		
١		3—]				\bowtie	ss	2		15	1.6/2		252	_		
	3					\bowtie			11					_		
		4	tar saturated, str	ong tar odor					20					7 Water encountered		
	2	1				\bowtie			16					while drilling at 4 — feet bgs		
		_ 7	FILL dark vellow	rish Brown (10YR 4/					4		0.7/0		80.1	leet bys		
	1	5	silt, some fine gra	avel, some silty clay e sand, trace cinder	,		SS	3	5	9	0.7/2		80.1			
		=		metal scrap debris,	J ,				5					=		
		6	loose, wet to sati	ırateu					2					Sampled 6-8 feet _ (001) -		
	0	1	FILL: moderate y	rellowish Brown (10) ice coarse to fine sa	YR nd.	\bowtie			5					(001)		
		7-	very stiff to stiff, I	ow plasticity, moist	,	\bowtie	ss	4		12	1/2	3.5	68.2			
	-1	\exists				\bowtie			7					- -		
		8				\bowtie		<u> </u>	10					_		
1/8/05	-2					\bowtie			3							
DT 11		ا ر ٲ	1/2" medium to o coated, wet	oarse sand lens, tar	•	\bowtie		١.	7		4.4/0	1.75	22.3			
MO.G	-3	3				\bowtie	SS	5	5	12	1.1/2	1/5	22.3	-		
RNS	-					\bowtie			10					=		
2 BU		10-	very stiff						8					PID readings due to _ smear on outside of _		
204.G	-4								4					clay sample 10-14 ─		
SON 1		11-					ss	6]	10	1.6/2	3.5	18.8	feet bgs		
ZAL IR	-5	$E^{}$							6					_ _		
SENE		12-						 	7					Sampled 12-14 feet _		
90	-6	-					K		3					(002) -		
JTAL L		, ‡	nale vellowich R	rown (10YR 6/2) silty		>>>		_	2	_	4 7 10	4.0	45.4			
NMEN	-7	13-	CLAY (CL), trace medium stiff, low	e coarse to fine sand	Í,		SS	7	5	7	1.7/2	1.0	15.1			
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05	•	\exists	medium still, low	piasticity, moist					7					_		
Ĺ		<u> </u>				<i>Y/////</i>	4	<u> </u>				·	1			

	\overline{R}	1177	1s R						Boring/M	lonitoring '	Well Num		B52
	N/			Street S	tation			Page 2 of 2					
	[V]		onnen	Project Number 32088		****			Date			12-2	-04
	SINCE 1898												
ect)	Elevation (feet) Depth (feet) Description							SAM	IPLING T	ے	<u> </u>	6	
] [#		Depth (feet)			hic 3		o=	ν.Το		Sample Recovery/Length (feet)	٠, <u>-</u>	PID Reading (PPM)	
		둹		:	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	ampl ery/L (feet)	Penetro- meter (TSF)	ID Re	
		ا ¤	Descr	ription		S	ΩΞ	0 2	^	Secov	ام ت		Remarks
\vdash	十		End of boring at	14 feet bgs					 .	<u> </u>			-
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ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS, MO.GDT 17/8/05		=				L					<u> </u>		

Burns & Project Name Former Willow Street Str							Proje	ct No. 32088		Borir	ıg/Monitoı	ring Well SB53	Number
\ \ \ \ \ \ \	$\frac{\alpha \Pi}{4aD}$		Coordinates				Ground	Elevation		Page	!	1 of 2	
10	SINC	E 1898 To			ize (inche	es)	5. Driller (:	.10	me Fave	L ela		1012	
Drilling		Diedrich D120	20		8 1/4			Company		rilling Co	mpany		
-	12-3-04	то 12-3-04	Logged By: Kar	hi Ma	tal		Review	, ,	Jason Bla			roved by:	Scott Letzel
		10 12-3-04	Logged By. Kai	111 770	lai		TCVICW		PLING		7 199	T	
Elevation (feet)	Depth (feet)									ıgth		ding	Depth to water while drilling
fion) u				Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	nple y/Ler set)	Penetro- meter (TSF)	PID Reading (PPM)	•
eva	Dep				O	San	Sar	ლ გ <u>ē</u>	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Sample Recovery/Length (feet)	Per m (T	OP .	Depth to water after drilling
<u>Ш</u>		Descrip	otion vish Brown (10YR 2	/2)	 					ፚ			Remarks
	1 3	silt, some silty clay	y, little coarse to fin	е				10					1
4		scrap debris, very dry to moist	dense to very loose) ,		SS	1	34	59	1.5/2		0.0	=
"		ary to motor						25					=
								9					
3								10					3
	2					ss		7	12	0.8/2		0.0	=
2	"]					33	2	5	'2	0.0/2		0.0	
								4				7	\mathbf{z}
1		saturated						2					Water encountered _ while drilling at 4 _
	<u> </u>							4					feet bgs -
0	5					SS	3	5	9	1/2		0.0	
	l∃							6					
-1	6							2					
		slight petroleum o	dor					2					\exists
-2	7-					ss	4	2	4	0.7/2		0.4	-
								1					
ر _ا -3	8												Sampled 8-10 feet
11/8/06	上上	FILL: olive Black ((5Y 2/1) silty clay, lit	tle			•	2					(001) –
) IOS	9 -	plasticity, moist to	d, trace brick, soft, wet	ow		ss	5	1	3	1.1/2	0.5	0.5	\exists
-4								2]
BURN	10-							1					
-5 G	'							1					=
1204								1		4 2/2	0.25	0.6	
6- <u>1</u>	''∃					SS	6	1	2	1.2/2	0.25	0.0	
NERA RA								2					<u> </u>
병 일 -7	12	5" lens of fine gra- tar coated, tar odd	vel and coarse sand	i ,				4]
JAL LC]	pale yellowish Bro	own (10YR 6/2) silty					4] 				=
-8	13-	CLAY (CL), trace	coarse to fine sand ow plasticity, moist	,		ss	7	2	6	1.2/2		7.3]
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05 Characteristics and the control of		·						1			<0.25]
ā[<i>\\\\\\\</i>	4	<u> </u>	<u> </u>		I		<u> </u>	

	P	liri	ns \mathcal{R}_{τ}			<u> </u>			Boring/M	lonitoring \	Well Num		B53
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			Project Name Former Willow	v Street S	tation			Page			2 of :	
	1	<u> 1CL</u>	onnell	Project Number 32088					Date			12-3	-04
L		SIN	CE 1898						51 1116				
	Elevation (feet)	Depth (feet)		ription	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	PLING Nalue	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
	-9 10	15	very soft to soft,	brown (10YR 6/2) silty e coarse to fine sand, low plasticity, moist black silt lenses 15 -		SS	8	WOH 1 1 2	2	1.4/2	<0.25	22.7	Sampled 14-16 feet (002) WOH = weight of the hammer tar globules smeared on outside of clay sample, strong tar odor
	11	16— - - 17— -				SS	9	1 2 1 1	3	1.1/2		2.7	14-20 feet bgs, PID readings due to smear 14-20 feet bgs
	13	18— - - 19— -				ss	10	1 2 3 23	5	1.3/2	0.5	7.5	Sampled 18-20 feet (003)
		20	End of boring at	20 feet bgs									
		21-											-
		22											-
.GDT 11/8/05		23— - - 24—											-
PJ BURNS MO		25—											-
AL IRON 1204.0		26 - -											-
LOG GENER		27— -											
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05		28— - - - - -											- - - - -

	R	urn	IC 0	Project Name			Proje	ct No. 32088		Borir	ıg/Monitoı	ring Well SB54	Number
	<u>ァ</u>	1 _{cD}		Former Willow Street Station Coordinates			Ground	Elevation		Page		1 of 2	
	<u> 1</u> V	ICL	E 1898	N 5187.477 E 5020 otal Depth (feet) Hole S	0.284 ize (inche	es)		.92	ek Natal			1012	
			L 1070	16	8 1/4		Driller (rk Natal				
-			Diedrich D120	<u> </u>				Company		rilling Co			Coott Lotzal
\vdash	_	12-2-04	То 12-2-04	Logged By: Kathi Wo	tal		Review		Jason Bla	zier	Appr	roved by:	Scott Letzel
Eleyation (feet)	מפו						1	SAIVI	PLING	£		ρ _ι	Depth to water while drilling
5		(fe			Graphic Log	<u>o</u> "	<u>a</u> e	// .5.	0	ole Leng t)	۲ اور ا	teadir PM)	
į	מנו	Depth (feet)			Gra	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Samp wery/ (fee	Penetro- meter (TSF)	PID Reading (PPM)	Depth to water after drilling
l i	ב ב		Descrip	otion		0,				Sample Recovery/Length (feet)			Remarks
		=	FILL: disturbed to bgs by test pitting	approximately 6 feet				2					= = =
					\bowtie			2					=
	6	1—				SS	1	1	3	0.4/2		2.4	=
		\exists						7					, -
	5	2—						20					Water encountered
3		#											while drilling at 2 — feet bgs —
	4	3				SS	2	17	34	1.6/2		186	-
Ī		\Box						17					
	3	4			\bowtie			22					=
								11]
	2	_ =						13	25	1 4/2		446	
	_	<u> </u>	coal tar saturated, strong tar odor	some free product,		SS	3	12	25	1.4/2		440	=
		=				1		28					=
	1	6-1	FILL: dusky yellow	rish Brown (10YR 2/2) o fine sand, little fine				6					
		\exists	gravel, trace wood	i, trace metal scrap , medium dense, wet				3					_
	0	7—	to saturated	, medium dense, wet		ss	4	5	8	1.1/2		179	
		=						11					
	-1	8											Sampled 8-10 feet
11/8/0]	moderate vellowis	h Brown (10YR 5/4)	<i>}}}}}</i>			4					(001) –
<u>.</u>	-2	9	silty CLAY (CL), tr	ace coarse to fine stiff, low plasticity,		SS	5	5	12	1.2/2		148	PID readings due to
OM Vo			moist	Still, low plasticity,				7			4.5+		smear on outside of – clay sample 9-16 –
ORN.	-3							11			4.5*		feet bgs
GPJ	-	10						3					
1204.	A							5					=
IRON .	-4					ss	6	7	12	1.3/2	4.25	1.9	
ERAL		E						8					
GEN .	-5	12—						4		w	-		
IL LOC			pale yellowish Bro	wn (10YR 6/2)									$oxed{E}$
AENT/	-6	13-	• . •			ss	7	5	12	1.6/2	3.75	8.2]
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS MO GDT 11/8/05		<u> </u>						7					
EN EN	-7						1	8	<u> </u>				

	Burns &							Boring/M	onitoring	Well Num	ber S	B54
L	1 _a D		Project Name Former Willo	w Street S	Station			Page			2 of	
	/ICL	onnen	Project Number 32088					Date			12-2	-04
	SIN	CE 1898		T	<u> </u>							
Elevation (feet)	(SAM	PLING	E.		<u>5</u>	
L (f	Depth (feet)			g g	o o	<u> </u>	ैं हैं इंग्रह		Sample Recovery/Length (feet)	ہٰ۔ ؍	PID Reading (PPM)	
atic	ebt			Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5	N Value	Samp very/ (feet	Penetro- meter (TSF)	ID R (Pf	
Ele		Desci	ription		0)	0, =			Seco.,	L.	L L	Remarks
	1 4						3					Sampled 14-16 feet (002)
	I						5					
-8	15-	pale yellowish B CLAY (CL), trace	Brown (10YR 6/2) silty ee coarse to fine sand, v plasticity, moist		ss	8	6	11	1.2/2	1.5	49.4	=
		medium stiff, low	v plasticity, moist				7]
-9	16-	End of boring at	16 feet bas		-		, , <u>, , , , , , , , , , , , , , , , , </u>					_
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105	24-]
S. M.	1 3]
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4.GPJ		·]
N 120	26—]
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9 9	27—											
ENVIRONMENTAL LOG GENERAL IRON 1204. GPJ BURNS_MO.GDT 11/8/05												‡
NAEN	28-]
N N N]
ī				<u> </u>	ь	L			.l	<u> </u>	<u> </u>	

	R _{1 1}	rn	c 0	Project Name			Proje	ct No. 32088		Borir	ıg/Monito	ring Well SB55	Number
	Du Ma	$\frac{D}{111}$	<u>s</u> &	Former Willow Street Sta Coordinates			Ground	Elevation	 ·	Page			
	VIC)(I	onnell	N 5137.089 E 5	032.795 e Size (inche	es)		.68		<u> </u>		1 of 2	
			. 1000	14	8 1/4		Driller (rk Natali				
Drill	ing Rig	j Di	iedrich D120				Drilling	Company		rilling Co	1		
Dat	e 12-2	2-04	то 12-2-04	Logged By: Kathi \	Votal		Review		Jason Bla	zier	Appı	roved by:	Scott Letzel
et)	` {	3					1	SAM	PLING	£		5	Depth to water
	Denth (feet)				<u></u> = 8	۵	e E	ري 5 د		le -engt)	6 L (PID Reading (PPM)	∑ Depth to water while drilling
atio	1 5	<u> </u>			Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	samp very/l (feet	Penetro- meter (TSF)	(PR	Depth to water after drilling
Elevation (feet)	2	7	Descr	iption		S	0=			Sample Recovery/Length (feet)	<u></u>	ш	Remarks
	┪	+	FILL: disturbed to	o approximately 6 feet				1					
6	,	7	bgs by test pitting	9				1					
	1.					ss	1		4	0.8/2		43.6	크
١,	.	4						3					=
*	' ₂ .	4						3					\exists
		7						1					
4	1 3	\exists				ss	2	2	3	0.4/2		11.6	=
	"	=				33	′	1	ľ	04/2		11.0	=
	3	=						2				4	7 =
	4	7						3					
	2	\exists						26					_
	5			dor, sheen on water,		ss	3	21	47	1/2		80.8	=
		=	saturated					8					
	 6	4	FILL: dusky velk	owish Brown (10YR 2/2),	- 👯								Sampled 6-8 feet
		14、	some silt, some	silty clay, little to some and, trace fine gravel,	,- XXX			5					(001) –
'	7.	∃ `	\ trace brick, trace	wood, medium dense,	! <i>\\\\\\</i>	ss	4	7	14	1.3/2	2.5	10.6	\exists
ļ	'	4	moderate yellow	rish Brown (10YR 5/4)			'	7					=
-	1 _	7	fine sand, very s	little to trace coarse to tiff, low plasticity, moist				8					_
3/05	8	3						3					PID readings from _ tar impacted smear _
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05	2	\exists				1		7					on outside of clay = sample 8-14 feet =
0.GD	9					ss	5	8	15	1.5/2	3.0	2.1	bgs
NS -	3	#						10					=
BUR	10	4					 						
4.GP.		\exists						3					- -
N 120	† ₁₁					ss	6	6	12	1.9/2	3.5	12.2	_
PL IRC	'	4						6	'-		1]
ENERA		4				1		8					_
වූ ව	12	\exists						3					Sampled 12-14 feet (002)
7AL (4						3			3.25		=
MEN	13	_	pale yellowish B	rown (10YR 6/2) silty		SS	7	4	7	1.5/2		3.3	
VIRON	7]	very soft, low pla	e coarse to fine sand, asticity, moist				5			0.25		
<u> </u>			· · · · · · · · · · · · · · · · · · ·		V/////	4	<u> </u>	<u> </u>	I	L	1	<u></u>	

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Caphic C	
Elevation (fee Percentage	
End of boring at 14 feet bgs 15— 16— 17— 18— 20— 21— 22— 23—	
End of boring at 14 feet bgs 15— 16— 17— 18— 20— 21— 22— 23—	
End of boring at 14 feet bgs 15— 16— 17— 18— 20— 21— 22— 23—	
End of boring at 14 feet bgs 15— 16— 17— 18— 20— 21— 22— 23—	
8 15—16—17—18—19—19—19—19—19—19—19—19—19—19—19—19—19—	emarks
15————————————————————————————————————	
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16—1 17—1 18—1 19—1 20—1 21—1 22—1 23—1	
17—1 18—1 19—1 20—1 21—1 22—1 23—1	Ξ.
17—1 18—1 19—1 20—1 21—1 22—1 23—1	4
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	21111	26.0			Proje	ct No. 32088		Borir	ng/Monito	ring Well SB56	Number	
L	<u>Burr</u>		Former Willow Street Coordinates			Ground	Elevation		Page)		
1	/ICL	onnell		4981.908 Hole Size (inch	ies)		.10			·	1 of 2	
			20	8 1/4		Driller (rk Natali				
Drillin	g Rig	Diedrich D120				Drilling	Company		rilling Co			0 111 1 1
Date	11-29-0	4 то 11-29-04	Logged By: Kath	ni Wotal		Review		Jason Bla	zier	Appı	roved by:	Scott Letzel
Elevation (feet)	Depth (feet)	Descriț		Graphic	Sample Type	Sample Interval	Blow Counts per 0.5'	PLING Name	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	☐ Depth to water while drilling ☐ Depth to water after drilling ☐ Remarks
4	1	silt, some to little o	vish Brown (10YR 2/z coarse to fine sand, gravel, little to trace s, very dense, moist	2)	ss	1	9 10 39 27	49	1.5/2		0.0	-
2	3-1-1	silty clay with blac coarse to fine san cinders, very stiff	sh Brown (10YR 4/2) k mottling, trace d, trace brick, trace to medium stiff, low		ss	2	9 6 4 6	10	1.6/2	2.75	0.0	-
1	4 1 1 1 1 1 1 1 1 1	plasticity, moist			ss	3	2	7	1.4/2	1.0	0.0	
-1	6						3 2 1	•	- · · · · -			-
-2	7—	2" cinder lens			ss	4	2 2 2	4	1.2/2	1.0	0.0	- - - -
3 WO.GDT 11/8/05	8-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	dusky yellowish B fibers	rown (10YR 2/2), tra	ce	ss	5	1 WOH		1.8/2	0.5	0.0	WOH = weight of _ the hammer
04.GPJ BURNS	10-						1					- - - - -
NERAL IRON 120	11	5" wood			ss	6	7 9 5	16	1.1/2	1.0	0.0	-
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05	12	material inferred.	14 feet bgs. Change own (10YR 6/2) silty medium to fine sand		ss	7	1 1 1	2	0/2			
ENVIRO		soft to medium st	ff, low plasticity, moi	st			2					

					9	_09	, 001	lulluc					
	Burns &								Boring/M	lonitoring \	Vell Numl	oer S	B56
	<u>_L</u>	ull	15 (I	Project Name Former Wille	ow Street S	Station			Page			2 of 2	2
	\mathcal{N}	1cD	onnell	Project Number 32088					Date			11-2	9-04
		SIN	CE 1898										
F			72 1070		-T	г			DLING				
1	Elevation (feet)	æ						SAIVI	PLING			D	
:	<u> </u>	Depth (feet)			<u>.0</u>					engt	,	PID Reading (PPM)	
1.	<u></u>	Ę			Graphic Log	e g	ple rval	Blow Counts per 0.5'	_ 9	et) Ke	etro SF)	Rea	
	ฐ)eb			ō	Sample Type	Sample Interval	⊞ S ₽	N Value	Sar over (fe	Penetro- meter (TSF)	PID (
l i	膃		Desc	ription						Sample Recovery/Length (feet)			Remarks
\vdash	-9		pale yellowish B	Brown (10YR 6/2) silty				1					-
			CLAY (CL), trac	Brown (10YR 6/2) silty te medium to fine sand, stiff, low plasticity, moist		1							7
		1 ₅ -	Soil to modium	ottill, fore placetory, mores				1	3	1.3/2	0.5	0.0	_
-	10	15-				ss	8	2		1.3/2	0.5	0.0	
1		7						2					-
		16				1			ļ	ļ			
-	11					1		1]
		-						1					<u>†</u>
	12	17—				ss	9		3	1.4/2	0.75	00	
	-							2				İ	_
								3					4
-	13	18-	medium stiff to	soft				1					Sampled 18-20 feet
		╛				1		'					(001) –
		,, 				1		1		4.00	0.05	0.0	ュ
-	14	19				ss	10	1	2	1.6/2	0.25	ψ.0	_
		=				1		3					_
		20-			_//////	1							
-		┌┈┪	End of boring at	t 20 feet bgs]
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		7											_
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		22—											-
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	Burns & Project Name Former Willow Street Sta							Proje	ct No. 32088		Borin	ıg/Monito	ring Well SB57	Number
				Coordinates				Ground	Elevation		Page		1 of 4	
	ĮV.		CE 1898	N 5054.921 Total Depth (feet)	E 499 Hole S	4.641 ize (inche	es)		81 No.	rk Natoli			1017	
				50		8 1/4		Driller (rk Natali				
Dril	lling	Rig	Diedrich D120						Company		rilling Co	1		0 11 -1 -1
Dat	te 1	11-30-0	04 To 11-30-04	Logged By: Ka	thi Wo	tal		Review		Jason Bla	zier	Аррі	roved by:	Scott Letzel
jet)	3	(k						Г	SAM	PLING	<u>c</u>		5	Depth to water
) (fe	-	Depth (feet)				hic	63	υ <u>π</u>	5. 5.		le -engt	٥ ـ (PID Reading (PPM)	while drilling
atio		pt				Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	samp very/l (feet)	Penetro- meter (TSF)	0 P. (P. R.	Depth to water after drilling
Flevation (feet)		ă	Descr	iption			S.	S =	0 11		Sample Recovery/Length (feet)	₾.		Remarks
			FILL: dusky vello	wish Brown (10YR 2	2/2)				25		<u></u>			-
		=	cinders, little coa	ay, little fine gravel, l rse to fine sand, trac	e				16					-
'	4	1-	glass, trace brick to wet	k, medium dense, mo	oist		ss	1		26	1.5/2		0.0	-
		∃							10					-
:	3	2—							7					
		_ ‡							4					
;	2	<u>,</u> ‡	FILL: olive Black	(5Y 2/1) cinders, litt		₩			4		4 7/0		0.0	<u>.</u>
		3	trace silty clay, lo	oòse, móist			SS	2	4	8	1.7/2		00	
1.	,	\exists							4					
	۱	4							1					
		_ =												
1 '	0	5—					SS	3	2	3	2/2		0.0	_
		7		(EV 0/4) - 11 EM - 1-					1			į		
-	1	<u></u> 3	trace cinders, litt	(5Y 2/1) silt, little to le to trace wood fibe	rs,				1					
		Ŭ∃	trace medium to moist	fine sand, very loose	е,				1					WOH = weight of the hammer
-:	2	#							woh					· -
		7					SS	4	1		1.8/2		0.0	
1.	3	$\mid \exists$						İ	WOH					
1	^ی	8							1					_
100		=						ļ						
<u>-</u>	4	9					ss	5	WOH		1.3/2		00	-
S S									1					•
SCR SCR SCR SCR SCR SCR SCR SCR SCR SCR	5	10							1		,,			0 1 140 40 5-15
3		'							1					Sampled 10-12 feet (001)
- 1204	6			(5Y 2/1) silty clay to					2					
Z S			silt, trace wood f fine sand, very lo	ibers, trace coarse to oose, moist	0		ss	6	1	3	0.8/2	<0.25	0.0	
FKAL	٫		, ,						1					
SEN -	.7	12—					\vdash	 						-
201									1					
- E	8	13					ss	7	WOH		1.8/2	0.25	00	-
ENVIRONMENTAL LOG GENERAL IRON 1204.GFJ BURNS, MO.GDT 177805		=							1					
Ž 	.9	=				XXX		Ì	2					

	P	Siiri	ns &					Boring/M	lonitoring '	Vell Num		B57
	7	$\frac{\sqrt{G\Gamma}}{\sqrt{G\Gamma}}$	Trojectivanie Tolinei villov	v Street S	Station			Page			2 of	
	1	1CL	Project Number 32088					Date			11-3	0-04
		SIN	CE 1898									
	et)	Œ					SAM	PLING				
	Elevation (feet)	Depth (feet)	Description	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
	10	15	FILL: olive Black (5Y 2/1) silty clay to silt, trace wood fibers, trace coarse to fine sand, very loose, moist pale yellowish Brown (10YR 6/2) silty		SS	8	1	3	1.6/2	0.75	0.0	- - - - -
-	11	16 16	CLAY (CL), trace coarse to fine sand, medium stiff to soft, low plasticity, moist				4					Sampled 16-18 feet
-	12	17—			SS	9	1 1 3	4	1.4/2	1.0	0.0	(002) - - - - - - - - -
-	13	18					1					
-	14	19 			SS	10	2 3	5	1.6/2	0.25	0.0	- - - -
-	15	20-					3			æ		
-	16	21	soft to medium stiff				1					
-	17	22 =			ss	11	2 3	5	2/2	0.75	0.0	- - - -
	18	23— =					3					<u>-</u>
MO.GDT 11	19	24— =	medium stiff to soft				1 2					- - -
SPJ BURNS	20	25— -			SS	12	2 2	4	2/2	0.25	0.0	- - -
204.0					\vdash					<u> </u>]
S	21	26-	soft to medium stiff		\vdash							
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05	22	27—	Soft to inicularit still		SS	13	1 1 2	3	2/2	0.75	0.0	
MENTAL	23	28-					3]
ENVIRON	24	=			SS	14	2	5	2/2	0.75	0.0	-

T	Buri	26.0						Boring/M	lonitoring \	Well Num	ber S	B57
___\	$\frac{1}{\sqrt{1-\Gamma}}$	115 X 11	Project Name Former Willow	v Street S	tation			Page			3 of 4	
	/ICL	onnell	Project Number 32088					Date			11-3	0-04
	SIN	CE 1898										
ef)	ਜ਼ੂ						SAM	PLING		ı		
Elevation (feet)	Depth (feet)	Desc	ription	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
-25	30-	pale yellowish B CLAY (CL), trac medium stiff to s	rown (10YR 6/2) silty e coarse to fine sand, soft, low plasticity, moist		SS	14	2 3 3	5	2/2	0.75	0.0	- - - - - - - -
-26	31—	soft to stiff										
-27	32—	551. (5 56)			SS	15	2 5 8 9	13	1.8/2	2.0	0.0	-
-28	33—											
-29	34-					46	3 5	40	1.6/2	2.0	0.0	- - - -
-30	35				SS 	16	7 11	12	1.0/2	2.0	0.0	
-31	36											. 4
-32	37—				SS	17	3 5 7	12	2/2	1.75	0.0	- - - -
-33	38-						10					
-34	39	stiff to very stiff					3 5					
ENVIRONMENTAL LOG GENERAL IKON 1204-GFJ BURNS, MOLGEDT 1708/05 2. 2. 2. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.	40				ss	18	8 9	13	2/2	2.75	0.0	-
1204.0												- - - -
96-	41	very stiff to stiff					2					
-37	42				SS	19	5 7	9	2/2	1.25	0.0	
-38	43											-
-39 -39					ss	20	3	12	2/2	2.0	0.0	1 -

	31111	ns ℓ_{τ}						Boring/M	lonitoring '	Vell Num		B57
___	AaD		Project Name Former Willo	w Street S	Station			Page			4 of	
1	/ICL	onnen	Project Number 32088					Date	·		11-3	0-04
	SIN	CE 1898			ı			DLING	·			
Elevation (feet)	Depth (feet)	Desc	ription	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	PLING value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
-40	45 -	pale yellowish B CLAY (CL), trac medium stiff to s	rown (10YR 6/2) silty e coarse to fine sand, soft, low plasticity, moist		ss	20	5 7 9	12	2/2	2.0	0.0	
-41	46—											
-42 -43	47				SS	21	3 5 7 8	12	1.7/2	1.75	0.0	
-44	48	soft to very stiff					3					
-44	49				SS	22	9	14	1.8/2	2.5	0.0	- - - -
	50	End of boring at	50 feet bgs									- - -
	52-											-
11/8/05	53-											- - - -
KNS_MO.GDI	54—											-
1204.GPJ BU	55 - - -											
CNEKAL IKON	56 -											-
ENVIRONMENTAL LOG. GENERAL IRON 1204. GPJ. BURNS, MO.GDT. 11/8/05	5/											
ENVIRONME	58 - - - -											-

							IIII I G LOG								
Burns & Project Name Former Willow Street Station						l	Project No. Boring/Monitoring Well Number SB58A								
	7U1			Former Willow Street Coordinates	et Station	<u> </u>			Elevation		Page)			
1	Vlcl	<u>)c</u>	onnell	N 5010.333	E 500	6.856		7.	.32				1 of 1		
	SI	N C E	1898	otal Depth (feet) 3.5	Hole S	ize (inche 8 1/4	es)	Driller (s) Mark Natali							
Drilli	ng Rig	Di	edrich D120		_			Drilling Company CS Drilling Company							
Date	12-1-	04	то 12-1-04	Logged By: Ka	ıthi Wo	tal		Review	ed by:	Jason Bla	zier	App	roved by:	Scott Letzel	
-			<u> </u>						SAM	PLING					
Elevation (feet)	Depth (feet)					ا ن					Sample Recovery/Length (feet)		PID Reading (PPM)		
l ië	<u>₹</u>					Graphic Log	e de	Sample Interval	Blow Counts per 0.5'	_ e_	nple y/Le	Penetro- meter (TSF)	Rea	i	
š	g					ʊ̈	Sample Type	San	2 S 2	N Value	Sar over (fe	Pe E E	OIA)	Depth to water after drilling	
#	-		Descri								Rec			Remarks	
7			FILL: dusky yellov	vish Brown (10YR 2 coarse to fine sand,	2/2)	\bowtie			1					=	
		3	little fine gravel, li	ttle roots, loose, mo	ist				2					=	
	1-	Ⅎ				\bowtie	ss	1	3	5	0.7/2		1.9		
6		Ⅎ												=	
1	2_	Ⅎ				\bowtie	<u> </u>		2					4	
5	-	Ⅎ	some scrap debri concrete powder	s, some fine gravel, in shoe		\bowtie	1		2					1	
		╛	•				ss	2	4		0.2/2]	
Ι.	3-	┪							57/3"					目	
4		┪-	Refusal - End of I	poring at 3.5 feet bg	ıs	<u> </u>	<u> </u>								
	4-	╛	Neiusai - Liiu oi i	Joining at 0.0 leet by	,							:		4	
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RAL		=======================================					1							- - - -	
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T.	Project Name							1	Project No. Bor				Boring/Monitoring Well Number			
	Burns & Former Willow Street Station						32088 SB58B									
li	1		$\frac{1}{2}$	nell	Co	ordinates	DEA E 500	0.640			Elevation 50		Page	•	1 of 1	
H	11	SIN	CE 1	898	Tot	al Depth (feet	364 E 500 Hole S	ize (inche	es)	Driller (rk Nata	<u></u> ii			
ľ						3.5		8 1/4			,					
Ľ	Drilling	Rig	Died	rich D120	- 1						Company		orilling C			
L	Date 1	12-1-0	4	To 12-1-04		Logged By:	Kathi Wo	tal		Review	,-	Jason Bla		App	roved by:	Scott Letzel
	Elevation (feet)	Depth (feet)						Graphic Log	e e	val val		PLING ₀	ple /Length at)	tro- er F)	PID Reading (PPM)	Depth to water while drilling
	Elevati	Dept		Desc				26 1	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID (Depth to water after drilling Remarks
	7	1111	sii litt tra	LL: dusky ye lt, little scrap tle coarse to t ace cinders, v oist	debr	is, little fine g sand, trace b	gravel, rick,		\$S	1	2 2 2	4	0.7/2		0.7	- - - -
	6	2									3					- -
	5	1111							SS	2	10 7		0/2			-
	4	3	cc	oncrete powd	er in	shoe		\bowtie			50/4"					-
		4	R	efusal - End o	of bo	ring at 3.5 te	et bgs									<u>-</u> -
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Project Name						Project No. Boring/Monitoring Well Number SB58C									
	Former Willow Street Station Coordinates						Ground Elevation Page								
$\mid N$	1cL) O	nnell		N 5008.933				7.39 1 of 1						
	SIN	СE	1898	Tot	al Depth (feet) 3.5	Hole S	ize (inche 8 1/4	es)	Driller (s) Mark Natali						
Drilling	Rig	Die	edrich D120		3.0		0 1/4		Drilling	Company	CS E	rilling C	ompany		
			то 12-1-04	T	Logged By:	Kathi Wo	tal		Review		Jason Bla		-T	roved by:	Scott Letzel
			10 (2.104			tatii 110	Ī				PLING				
Elevation (feet)	Depth (feet)									07		Ę		စ္ခ	Depth to water
, r) (fe						g g	Ð	<u>, , e</u>	5 <u>1</u> 5) Leng	٥ ـ <u> </u>	eadi M)	
atic) Spt						Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Depth to water after drilling
ie.	۵		Dagas					Ω,	တ =	Oa		S eco	g -		Remarks
Ш_		<u> </u>	Desci FILL: dusky velle			2 2/2)	XXXX					<u> </u>			Remarks
7	=	1	FILL: dusky yello silt, little scrap d	lebri	is, some to little					2					-
	_ =		coarse to fine sa moist	ana,	trace roots, loo	ose,	\bowtie			2					-
	1						\bowtie	SS	1	3	5	1/2		0.0	-
6	=	1					\bowtie								- -
	2—	1					\bowtie			8					-
5	_ =	1								8]		-
	=	1					\bowtie	ss	2	10		1.5/1.5		0.3	- -
	3	ł					\bowtie		-	50/2"					
4	_		concrete powde	r in	shoe		 								-
		1	Refusal - End of	r DOI	ring at 3.5 bgs										-
	4	}													-
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Solution Solution		31122	150	Project Name Former Willow Street Station				ct No. 32088		Boring/Monitoring Well Number SB58D				
Total Depth (feet) Hole Size (inches) 8 1/4 Drilling Rig Diedrich D120 Drilling Rig Diedrich D120 Drilling Company CS Drilling Company CS Drilling Company CS Drilling Company CS Drilling Company CS Drilling Company CS Drilling Company CS Drilling Company Drilling C	 	$\frac{J_{CD}}{I_{CD}}$	$\frac{10}{100}$	Coordinates			Ground	Elevation		Page)			
Drilling Rig Diedrich D120 Drilling Company CS Drilling C		SINC	CE 1898	Total Depth (feet) Hole S	ize (inche	es)			rk Natali			. 0, 2		
Date 12-2-04 To 12-2-04 Logged By: Kathi Wotal Reviewed by: Jason Blazier Approved by: Scott Letzel	Drillin	ng Rig	Diedrich D120	10	0 1/4									
Description Description Fill: dark yellowish Brown (10YR 5/4) silt, some coarse to fine sand, some fine gravel, trace brick, loose, dry to moist SS 2 20 20 20 20 3 3 3 3 7 0/2 3 3 3 3 3 3 4 7 0/2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3			то 12-2-04	Logged By: Kathi Wo	otal		Review	ed by:	Jason Blaz	zier	Арр	roved by:	Scott Letzel	
FILL: dark yellowish Brown (10YR 5/4) silt, some coarse to fine sand, some fine gravel, trace brick, loose, dry to moist SS 1 4 8 0.8/2 0.0 dense, drilled through obstruction 2 - 2.5 feet bgs SS 2 20 36 0.8/2 0.0 3 4 7 0/2 SS 3 3 7 0/2 SS 3 3 7 0/2 This is olive Gray (5Y 4/1) silty clay, some brick, some coarse to fine sand, very soft, wet SS 4 1 1 125/2 0.0 WOH = weight of the hammer SS 4 1 1 125/2 0.0 SS 4 1 1 125/2 0.0 SS 4 1 1 125/2 0.0 SS 4 1 1 125/2 0.0	et)	₽.						SAM	PLING					
FILL: dark yellowish Brown (10YR 5/4) silt, some coarse to fine sand, some fine gravel, trace brick, loose, dry to moist SS 1 4 8 0.8/2 0.0 dense, drilled through obstruction 2 - 2.5 feet bgs SS 2 20 36 0.8/2 0.0 3 4) (fe	(fee			일_		a –	<i>w</i> <u>ro</u>		e ength	<u>.</u>	ading M)		
FILL: dark yellowish Brown (10YR 5/4) silt, some coarse to fine sand, some fine gravel, trace brick, loose, dry to moist SS 1 4 8 0.8/2 0.0 dense, drilled through obstruction 2 - 2.5 feet bgs SS 2 20 36 0.8/2 0.0 3 4	atio	bth			Grapl Log	ample Type	ample	Blow Count	/alne	ampl /ery/L (feet)	enetro meter (TSF)	ID Re (PP	Depth to water	
FILL: olive Gray (5Y 4/1) sitty clay, some prick, some coarse to fine sand, very soft, wet SS 4 1 1.25/2 0.0	E E E e o	ă	Descr	iption		S.	S	0 11		Reco	<u> </u>	۵.	- I	
gravel, trace brick, loose, dry to moist SS			FILL: dark yellow	ish Brown (10YR 5/4)				3					_	
dense, drilled through obstruction 2 - 2.5 feet bgs 4 3		=	gravel, trace bric	k, loose, dry to moist				4					直	
5 2 dense, drilled through obstruction 2 - 2.5 feet bgs SS 2 20 36 0.8/2 0.0 3 4 7 0/2 SS 3 3 7 0/2 FILL: olive Gray (57 4/1) sitty clay, some brick, some coarse to fine sand, very soft, wet SS 4 1 WOH 1 25/2 0.0 Sampled 8 10 feet	6					SS	1	4	8	0.8/2		0.0	=	
4 3								4						
SS 2 16 36 0.8/2 0.0	5	2		ough obstruction 2 - 2.5				41					-	
3 4 7 0/2 2 5								16					Ē	
3 4 7 0/2 2 5	4	3 -				SS	2	20	36	0.8/2		0.0		
2 5 SS 3 7 O/2								20						
2 5	3	4-						7					=	
Till: olive Gray (5Y 4/1) silty clay, some brick, some coarse to fine sand, very soft, wet SS 4 1 WOH 1.25/2 0.00 Sampled 8.10 feet		╽╻╡						4					<u></u>	
FILL: olive Gray (5Y 4/1) silty clay, some brick, some coarse to fine sand, very soft, wet SS 4 1 WOH 1.25/2 0.0 Sampled 8.10 feet	2					SS	3	3	7	0/2]	
FILL: olive Gray (5Y 4/1) sirty clay, some brick, some coarse to fine sand, very soft, wet 1 WOH 1.25/2 0.0 Sampled 8 10 feet								1				7	<u> </u>	
soft, wet 0 7	1	6-1	FILL: olive Gray	(5Y 4/1) silty clay, some				1						
1 WOH <0.25 Sampled 8.10 feet			soft, wet	,				WOH						
Sampled 8.10 feet	0					SS	4	1		1.25/2		0.0		
-1 8								woн			<0.25		=	
SS S WOH 1.1/2 <0.25 5.2	-1 908	8						1					Sampled 8-10 feet (001)	
SS 5 1 WOH 1.1/2 <0.25 5.2	11/ 11/							WOH					=	
Sampled 12-14 feet Solution	Ū -2 OM,	 	petroleum odor			SS	5	1		1.1/2	<0.25	5.2	<u>-</u>	
FILL: olive Black (5Y 2/1) silty clay, some wood fibers, little to trace brick, soft, low plasticity, moist SS 6 WOH SS 6 SIDE OF THE STATE OF THE	URNS	,						WOH						
FILL: olive Black (5Y 2/1) silty clay, some wood fibers, little to trace brick, soft, low plasticity, moist SS 6 2/2 0.25 2.7 Sampled 12-14 feet	B -3							WOH						
SS 6 2/2 0.25 2.7 Sampled 12-14 feet	1204.		some wood fiber	s, little to trace brick,							6.5-			
Sampled 12-14 feet _ (002) MS/MSD	4- 4		soft, low plasticit	y, moist		SS	6			2/2	0.25	2.7	-	
Ss 7 WOH 1.3/2 0.5 0.0 Sampled 12-14 feet (002) MS/MSD	ENERA													
ss 7 1.3/2 0.5 0.0	ප් -5 ඉ	12-						WOH					Sampled 12-14 feet _ (002) MS/MSD _	
SS 7 1.3/2 0.5 0.0	TAL L													
	6- Je	13-				SS	7			1.3/2	0.5	0.0		
	ENVIRC	=					<u></u>							

li	П		0				,			onitoring \	Vell Num	ber S	B58D	
	<u> </u>	um	ns&	Project Name Former Willow	v Street S	Station			Page 2 of 2					
	N	<u> 1cL</u>	onnell	Project Number 32088					Date			12-2	-04	
		SIN	CE 1898											
Γ	et)	£						SAM	/IPLING					
	Elevation (feet)	Depth (feet)	Desc	ription	Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks	
	-8	15	FILL: olive Black some wood fibe soft, low plastick trace wood fiber	rs, little to trace brick, ty, moist		ss	8	WOH	•	2/2	0.25	1.5	-	
	-9 -10	16— - 17— -	pale yellowish E CLAY (CL), trac soft, low plastic	Brown (10YR 6/2) silty se coarse to fine sand, ty, moist		SS	9	1 1 1 2	2	0.7/2	0.5	0.0	Sampled 16-18 feet (003) MS/MSD 	
		18	End of boring at	t 18 feet bgs									- - - - - - -	
		20												
		22— - - - -											-	
O.GDT 11/8/05		23—											-	
4.GPJ BURNS M		25— - -											-	
NERAL IRON 120		26 - -											-	
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05		27— - - 28—												
ENVIRON		- -											- - - -	

ſ	Burns & Project Name Former Willow Street Station						Project No. 32088			Boriı	Boring/Monitoring Well Number SB59			
	McDonnell Coordinates N 5174.428 E 5068.572						Ground Elevation Page 1 of 2							
	Total Depth (feet) Hole Size (inches)							Driller (s) Jaime Favela						
٢	Drilling	ı Ria	Diedrich D120	18	0 1	4		Company	CS D	rilling C	ompany			
H		12-3-04	<u>I</u>	Logged By: Kath	ni Wotal		Review	ed by:	Jason Bla	zier	Арр	roved by:	Scott Letzel	
F								SAM	PLING					
	(fee	Depth (feet)			ي ا			_		ingth		PID Reading (PPM)	Depth to water while drilling	
	ation	pth			Graphic	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	ample ery/Le feet)	Penetro- meter (TSF)	D Reg (PPA	Depth to water after drilling	
	Elevation (feet)	<u>م</u>	Descr	intion		Sa	ß⊑	-08	>	Sample Recovery/Length (feet)	Pe	┇	∡ after drilling Remarks	
F	ш.		FILL: dusky yello	wish Brown (10YR 2/2	2)	\boxtimes		6		<u> </u>			_	
			little fine gravel, t cinders, medium	n sand, little silty clay, race brick, trace		\aleph		10					=	
	7	1—	cinders, medium	dense, moist		Ss Ss	1	12	22	1.4/2		2.3	=	
		╛						12]	
	6	2				$ \hspace{1cm} \big \backslash \hspace{1cm} \big \backslash \hspace{1cm} \big \rangle$	1	6					-	
l		=						7				_	,	
	5	3-	$^-\setminus$ medium to fine s	(5Y 4/1) poorly graded and, medium dense,	' / ※	X ss	2	4	11	1.7/2	3.5	1.5	/ =	
			FILL: olive Gray	(5Y 4/1) silty clay with trace coarse to fine	💥			3					=	
ı	4	4	sand, very stiff, lo	ow plasticity, moist		$ \hspace{1cm} \big\backslash\hspace{1cm}$		3					=	
								3]	
	3	5				⊗ ss	3	5	8	1.1/2	3.5	1.1	_	
		=						5					\exists	
	2	6-	dusky yellowish l	Brown (10YR 4/2) silty	,	}}							Sampled 6-8 feet _	
		=	CLAY (CL) with o	orange mottling, trace nd, hard to very stiff,				4					(001)	
	1	7-	low plasticity, mo	pist		ss	4	5	12	1.9/2	4.5+	0.0	\exists	
		=						7 12					=	
9	0	8-				% —		<u> </u>]	
11/8/0								3					7	
.GDT	-1	9_	trace roots			ss	5	5	13	1.7/2	4.0	0.5	=	
NS MC		┨						8						
BUR	-2	10-	very stiff to hard			//		9					크	
74.GPJ			very sun to nara					3					-	
ON 120	-3	11—				ss	6	5	12	1.7/2	4.25	0.0	\exists	
3AL IR]						7						
GENE	-4	12	hard to your stiff			//		8					=	
507			hard to very stiff					3						
ENTAL	-5	13-				ss	7	5	12	2/2	2.75	0.0	-	
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS MO.GDT 11/8/05								7]	
ENVI		_					_	9			<u></u>		_	

							Boring/Monitoring Well Number SB59					
			Project Name Former Willow Project Number 32088	v Street S	Station			Page 2 of 2 Date 12-3-04				
		CE 1898	Project Number 32088			<u></u>		Date				
(F)							SAM	MPLING				
Elevation (feet)	Depth (feet)	Descrip		Graphic Log	Sample Type	Sample Interval	Blow Counts per 0.5'	N Value	Sample Recovery/Length (feet)	Penetro- meter (TSF)	PID Reading (PPM)	Remarks
-7	15	dusky yellowish Br CLAY (CL) with ora coarse to fine sand low plasticity, mois	own (10YR 4/2) silty ange mottling, trace I, hard to very stiff, t		SS	8	2 4 4 7	8	1.9/2	3.0	0.0	, , , , , , , , , , , , , , , , , , , ,
-8 -9	16— 17—	pale yellowish Brov CLAY (CL), trace of stiff, low plasticity,	wn (10YR 6/2) silty coarse to fine sand, moist		SS	9	2 4 5 4	9	1.5/2	10	0.0	Sampled 16-18 feet (002)
-10	18 -	End of boring at 18	ß feet bgs									- - - - - -
	20-											
	21—											- - - - - - - -
DT 11/8/05	23											-
GPJ BURNS MO.C	24—————————————————————————————————————											- - - - -
VERAL IRON 1204.	26											-
ENVIRONMENTAL LOG GENERAL IRON 1204.GPJ BURNS_MO.GDT 11/8/05	27— — — — 28—											- - - - - - - - - -
ENVIRON												- - - -

APPENDIX C
SUPPLEMENTAL SITE INVESTIGATION
SAMPLING DATA VALIDATION MEMORANDUM,
LAB ACCREDITATION, AND ANALYTICAL DATA
THE FORMER WILLOW STREET STATION
MANUFACTURED GAS PLANT SITE,
1640 NORTH KINGSBURY PORTION

BURNS & McDONNELL

Client: Peoples Gas Prepared By: Saba Athif

Site: The Former Willow Street Gas Manufactured Date: December 16, 2004

Gas Plant Site, 1640 North Kingsbury Portion

Project #: 32088 Checked By: Christy Barry
File No.: I7 Date: December 29, 2004

Title: Data Validation of Soil Samples

Collected November 29 through December 2, 2004

PURPOSE

The purpose of this document is to present the evaluation and validation of soil sampling analytical results.

VALIDATION CRITERIA

The evaluation and validation consisted of the following:

- Evaluated analytical holding times and sample preservation.
- Evaluated surrogate recoveries.
- Evaluated laboratory control samples and laboratory control sample duplicates (LCS/LCSD).
- Evaluated laboratory blank analyses.
- Evaluated field matrix spike/matrix spike duplicate (MS/MSD) analyses.
- Reviewed laboratory case narratives.

SAMPLING EFFORT

Thirty (30) soil samples were collected for chemical analysis at the 1640 North Kingsbury portion of the former Willow Street Station manufactured gas plant site in Chicago, Illinois (Site) on November 29 through December 2, 2004.

LABORATORY

Samples were analyzed and validated by STAT Analysis Corporation (STAT) of Chicago, Illinois in accordance with Illinois Environmental Protection Agency (Illinois EPA) Site Remediation Program (SRP) requirements for analytical data reduction and validation.

CONCLUSIONS

Laboratory data have been reviewed and are acceptable for use with qualification. STAT performed laboratory validation and determined that all chemical analytical results were usable. Burns & McDonnell performed further evaluation and validation and determined that the overall quality of the chemical analytical results was acceptable. However, due to poor surrogate recovery, some resultant values were qualified estimated "J" and estimated non-detect "UJ."

REFERENCES

The following reference documents were used:

- (1) Illinois Administrative Code, 1998. *Site Remediation Program*, Title 35: Environmental Protection, Subtitle G: Waste Disposal, Chapter I: Pollution Control Board, Part 740.
- (2) USEPA, 1986. *Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods*, EPA Publication No. SW-846, [Third Edition (September 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), III (December 1996), Draft IVA (January 1998), Daft IVB (November 2000)].
- (3) United States Environmental Protection Agency (USEPA), 1999. Contract Laboratory Program National Functional Guidelines for Organic Data Review, October.

SAMPLE INFORMATION

Table 1 presents sample numbers and analyses requested. Table 2 lists the methods used to analyze the soil samples for chemical parameters.

HOLDING TIME AND SAMPLE PRESERVATION EVALUATION

Table 3 presents the analytical holding times that were used to evaluate and validate the extractions and analyses performed. All sample extractions and analyses were performed within the holding time; therefore, no qualification was necessary. All samples were received at STAT within the acceptable sample preservation temperature; therefore no qualification was necessary.

SURROGATE RECOVERY EVALUATION

Surrogate recoveries were generally within the acceptable laboratory limits; except for the following:

- Surrogate recoveries were below the required range for volatile organic compound (VOC) analyses
 for the samples SB50-003 (non-diluted results only), SB52-002, SB53-003, SB58-002 and SB58-003.
 Therefore, all detected results for the above mentioned samples were qualified estimated "J" and all
 non-detect results were qualified estimated non-detect "UJ."
- One semi-volatile organic compound (SVOC) surrogate was outside acceptable limits for acid or base/neutral fraction in a few samples; however, no qualification is necessary unless two or more SVOC surrogates are outside acceptable limits for each fraction. Therefore, no samples were qualified based on SVOC surrogate recovery.

LABORATORY CONTROL SAMPLE EVALUATION

Laboratory control samples were prepared and run for this sampling event. A few LCS or LCSD sample recoveries for some VOCs and SVOCs were above the acceptable recovery limits. All primary results associated with these LCS/LCSD results were non-detect; therefore, no qualification was necessary.

LABORATORY BLANK ANALYSIS EVALUATION

Laboratory blanks were prepared and run for this sampling event. Laboratory blank results were nondetect or detected below the reporting limit; therefore, no qualification was necessary.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE EVALUATION

One surface soil, SB58-001, and one subsurface soil, SB58-002, field matrix spike/matrix spike duplicate (MS/MSD) samples were prepared and run for this sampling event. Visually, these samples appeared non-impacted, however, laboratory analyses showed the presence of high concentrations of total petroleum hydrocarbons (TPH) and polynuclear aromatic hydrocarbons (PAHs) in sample SB58-001, and elevated concentrations of PAHs in sample SB58-002. Laboratory blank and LCS/LCSD results were acceptable for all VOC and SVOC samples, and surrogate recoveries were also acceptable, except for the five VOC samples that were qualified as discussed above. Since these other quality control results were generally acceptable, no qualification was required based on field MS/MSD samples with interference from TPH or PAHs.

LABORATORY CASE NARRATIVE REVIEW

A review of the STAT Analysis Corporation laboratory case narratives indicates that the overall quality of the chemical analytical results was acceptable; therefore, no qualification was necessary.

Table 1 List of Sample Numbers and Analyses The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Sample	1040 North Kingsbury Fortion
Number	Analyses
WSS-SB46-001	Target compound list (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), polynuclear aromatic hydrocarbons (PAHs), and total petroleum hydrocarbons (TPH).
WSS-SB46-002	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB47-001	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB47-002	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB48-001	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB48-002	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB49-001	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB49B-001	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB50-001	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB50-002	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB50-003	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB51-001	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB51-002	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB52-001	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB52-002	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB53-001	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB53-002	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB53-003	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB54-001	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB54-002	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB55-001	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB55-002	TCL VOCs, TCL SVOCs, PAHs, and TPH.

Table 1 (Continued) List of Sample Numbers and Analyses The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Sample Number	Analyses
WSS-SB56-001	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB57-001	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB57-002	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB58-001	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB58-002	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB58-003	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB59-001	TCL VOCs, TCL SVOCs, PAHs, and TPH.
WSS-SB59-002	TCL VOCs, TCL SVOCs, PAHs, and TPH.

Table 2 Analytical Methods The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Parameter	Analytical Method ¹
TCL VOCs ²	8260B
TCL SVOCs	8270C
PAHs	8270-SIM
ТРН	8015M

NOTE:

- (1) USEPA 1986
- (2) Sampled using USEPA Method 5035.

Table 3 Analytical Holding Times The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Analyses	Holding Time From Sample Collection ¹
TCL VOCs	14 days
TCL SVOCs and PAHs	14 days pre-extraction, 40 days post extraction
ТРН	14 days

NOTE:

(1) USEPA 1986





STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY NELAP - RECOGNIZED

ENVIRONMENTAL LABORATORY ACCREDITATION

is hereby granted to

STAT ANALYSIS CORPORATION
2201 WEST CAMPBELL PARK DRIVE
CHICAGO, IL 60612-3547

NELAP ACCREDITED
ACCREDITATION NUMBER #100445



According to the Illinois Administrative Code, Title 35, Subtitle A, Chapter II, Part 186, ACCREDITATION OF LABORATORIES FOR DRINKING WATER, WASTEWATER AND HAZARDOUS WASTES ANALYSIS, the State of Illinois formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed below.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part 186 requirements and acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part 186. Please contact the Illinois EPA Environmental Laboratory Accreditation Program (IL ELAP) to verify the laboratory's scope of accreditation and accreditation status. Accreditation by the State of Illinois is not an endorsement or a quarantee of validity of the data generated by the laboratory.

Jeff Johnston

Manager

Division of Laboratories

Janet Cruse

Accreditation Officer

Environmental Laboratory Accreditation Program

Certificate No.:

001115

Expiration Date:

09/30/2005

Issued On:

09/27/2004

Certificate No.:

001115

State of Illinois Environmental Protection Agency

Awards the Certificate of Approval

STAT Analysis Corporation 2201 West Campbell park Drive Chicago, IL 60612-3547

According to the Illinois Administrative Code, Title 35, Subtitle A, Chapter II, Part 186, ACCREDITATION OF LABORATORIES FOR DRINKING WATER, WASTEWATER AND HAZARDOUS WASTES ANALYSIS, the State of Illinois formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed below.

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Antimony

Beryllium

Calcium

Copper

Sodium

Zinc

Magnesium

Potassium

Hazardous and Solid Waste, Inorganic

1010

Ignitability

1311

TCLP (Organic and Inorganic)

1312

Synthetic Precipitation Leaching Procedure

6020

Aluminum

Barium

Cadmium

Cobalt

Lead

Nickel

Silver

Vanadium

7196A

Chromium VI

7470A

Mercury

7471A

Mercury

9012A

Cyanide

9040B

Hydrogen ion (pH)

9045C

Hydrogen Ion (pH)

9066

Phenolics

9095A

Paint Filter

Chapter 7/9014

Reactive Cyanide

Chapter 7/9034

Reactive Sulfide

Arsenic

Boron

Chromium

Iron

Manganese

Selenium

Thallium

001115

State of Illinois

Environmental Protection Agency

Awards the Certificate of Approval

STAT Analysis Corporation 2201 West Campbell park Drive Chicago, IL 60612-3547

Hazardous	and	Solid	Waste	Organic
<i>nazaruvus</i>	allu	JUILU	FF GOLG.	UI yaiiic

RO.	15R

Diesel range organics (DRO)

8081A

4,4'-DDD

Aldrin beta-BHC

Dieldrin

Endosulfan sulfate Endrin ketone Heptachlor

Toxaphene

8082

PCB-1016

PCB-1242 PCB-1260

8260B

1,1,1,2-Tetrachloroethane

1,1,2-Trichloroethane

1,1-Dichloropropene
1,2,4-Trichlorobenzene

1,2-Dibromoethane (EDB)

1,2-Dichloropropane

1,3-Dichloropropane

2,2-Dichloropropane

2-Chlorotoluene

2-Nitropropane

4-Methyl-2-pentanone (Methyl isobutyl ketone, I

Acrylonitrile

Bromochloromethane Bromomethane Chlorobenzene Chloroform

cis-1,3-Dichloropropene

Dichloromethane (Methylene chloride)

Ethyl ether Isopropylbenzene Methyl-t-butyl ether

n-Butanol

p-Isopropyltoluene

Styrene Toluene Trichloroethene Vinyl chloride

8270C

1,2,4-Trichlorobenzene

Gasoline range organics (GRO)

4,4'-DDE

alpha-BHC

Chlordane - not otherwise specified

Endosulfan I Endrin

gamma-BHC (Lindane) Heptachlor epoxide

PCB-1221

PCB-1248

-CD-1240

1,1,1-Trichloroethane

1,1-Dichloroethane

1,2,3-Trichlorobenzene

1,2,4-Trimethylbenzene

1,2-Dichlorobenzene 1,3,5-Trimethylbenzene

1.4-Dichlorobenzene

2-Butanone (Methyl ethyl ketone, MEK)

2-Hexanone

2-Propanol (isopropyl alcohol)

Acetone Benzene

Bromodichloromethane

Carbon disulfide

Chlorodibromomethane (Dibromochloromethane

Chloromethane
Dibromomethane
Diethyl ether
Ethylbenzene
Methyl ethyl ketone

Methyl ethyl keto m-Xylene n-Butylbenzene p-Xylene tert-Butylbenzene

tert-Butylbenzene trans-1,2-Dichloroethene Trichlorofluoromethane

Xylenes (Total)

1.2-Dichlorobenzene

4.4'-DDT

alpha-Chlordane

delta-BHC

Endosulfan II Endrin aldehyde

gamma-Chlordane

Methoxychlor

Methoxychior

PCB-1232

PCB-1254

1,1,2,2-Tetrachloroethane

1,1-Dichloroethene

1,2,3-Trichloropropane

1,2-Dibromo-3-chloropropane (DBCP)

1,2-Dichloroethane

1,3-Dichlorobenzene

1,4-Dioxane

2-Chloroethyl vinyl ether

2-Methyl-1-propanol (Isobutyl alcohol)

4-Chlorotoluene Acrolein (Propenal) Bromobenzene Bromoform

Carbon tetrachloride

Chloroethane cis-1,2-Dichloroethene

Dichlorodifluoromethane

Ethyl acetate Hexachlorobutadiene

Methyl isobutyl ketone Naphthalene o-Xylene sec-Butylbenzene

Tetrachloroethene trans-1,3-Dichloropropene

Vinyl acetate

1,2-Diphenylhydrazine

Certificate No.: 001115

State of Illinois Environmental Protection Agency

Awards the Certificate of Approval

STAT Analysis Corporation 2201 West Campbell park Drive Chicago, IL 60612-3547

Hazardous	and S	olid Waste	e. Organic

1,4-Dichlorobenzene

2.3.4.6-Tetrachlorophenol

2,4-Dichlorophenol

2,4-Dinitrotoluene (2,4-DNT)

2-Chiorophenol

2-Nitroaniline

3-Nitroaniline

4-Chloro-3-methylphenol

4-Methylphenol

Acenaphthene

Anthracene

Benzo(a)pyrene

Benzo(k)fluoranthene

Bis(2-chloroethoxy) methane

Bis(2-ethylhexyl) phthalate

Chrysene

Diethyl phthalate

Di-n-octyl phthalate

Fluorene

Hexachlorocyclopentadiene

Isophorone

Nitrobenzene

N-Nitrosodiphenylamine

Pentachiorophenol

Pyrene

8321A

2,4,5-T

2,4-DB

Dichlorprop

MCPP

8270C

1.4-Dinitrobenzene

2,4,5-Trichlorophenol

2,4-Dimethylphenol

2,6-Dinitrotoluene (2,6-DNT)

2-Methylnaphthalene

2-Nitrophenol

4,6-Dinitro-2-methylphenol

4-Chloroaniline

4-Nitroaniline

Acenaphthylene

Benzidine

Benzo(b)fluoranthene

Benzoic acid

Bis(2-chloroethyl) ether

Butyl benzyl phthalate

Dibenz(a,h)anthracene

Dimethyl phthalate

Diphenylamine

Hexachlorobenzene

T ICAGCITOTODCI (2CT)

Hexachloroethane

m-Cresol (3-Methylphenol)

N-Nitrosodimethylamine

o-Cresoi (2-Methylphenol)

Phenanthrene

Pyridine

2,4,5-TP (Silvex)

Dalapon

Dinoseb

1,3-Dichlorobenzene

1-Methylnaphthalene

2,4,6-Trichlorophenol

2,4-Dinitrophenol

2-Chloronaphthalene

2-Methylphenol

3,3'-Dichlorobenzidine

4-Bromophenyl phenyl ether

4-Chlorophenyl phenyl ether

4-Nitrophenol

Aniline

Benzo(a)anthracene

Benzo(g,h,i)perlyene

Benzyl alcohol

Bis(2-chloroisopropyl) ether

Carbazole

Dibenzofuran

Di-n-butyl phthalate

Fluoranthene

Hexachlorobutadiene

Indeno(1,2,3-cd) pyrene

Naphthalene

N-Nitrosodi-n-propylamine

p-Cresol (4-Methylphenol)

Phenol

2.4-D

Dicamba

MCPA

ANALYTICAL DATA

2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

December 15, 2004

Burns & McDonnell 2601 W. 22nd Street OakBrook, IL 60523-1229 Telephone: (312) 563-0371

Fax: (630) 990-0301

RE: 32088 Willow Street Station- General Iron STAT Project No: 0411515

Dear Diane Saftic:

STAT Analysis received 4 samples for the referenced project on 11/29/2004. The analytical results are presented in the following report.

This report is revised to reflect changes made after the initial report was issued.

All analyses were performed in accordance with the requirements of 35 IAC part 186 (Accreditation #100445). Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 563-0371.

Sincerely,

Craig Chawla

Project Manager

The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory.

STAT Analysis Corporation

Date: December 15, 2004

Client: Burns & McDonnell

Project: 32088 Willow Street Station- General Iron Work Order Sample Summary

Lab Order: 0411515

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
0411515-001A	WSS-SB50-001		11/29/2004 10:30:00 AM	11/29/2004
0411515-001B	WSS-SB50-001		11/29/2004 10:30:00 AM	11/29/2004
0411515-002A	WSS-SB50-002		11/29/2004 10:45:00 AM	11/29/2004
0411515-002B	WSS-SB50-002		11/29/2004 10:45:00 AM	11/29/2004
0411515-003A	WSS-SB50-003		11/29/2004 11:05:00 AM	11/29/2004
0411515-003B	WSS-SB50-003		11/29/2004 11:05:00 AM	11/29/2004
0411515-004A	WSS-SB56-001		11/29/2004 3:20:00 PM	11/29/2004
0411515-004B	WSS-SB56-001		11/29/2004 3:20:00 PM	11/29/2004

Page 1 of 1

STAT Analysis Corporation

Date: *December 15, 2004*

CLIENT: Burns & McDonnell

Project: 32088 Willow Street Station- General Iron CASE NARRATIVE

Lab Order: 0411515

Due to matrix interference, sample WSS-SB50-003 (0411515-003) had VOC surrogate Toluene-d8 out of control for both analysis and reanalysis (82%/83% recovery, QC Limits 85-110%).

Due to matrix interference, sample WSS-SB50-001 (0411515-001) had high SVOC surrogate recovery for 2,4,6-Tribromophenol (135% Recovery, QC Limits 19-122%)

The Laboratory Control Sample (LCS-12058-SVOC) had high SVOC spike recovery for N-Nitrosodi-n-propylamine (108% Recovery, QC Limits 55-100%).

Due to matrix interference, the SVOC MS/MSD prepared from sample WSS-SB50-003 (0411515-003) had the following compounds out of control:

2,4-Dinitrotoluene: 43%/45% Recovery, QC Limits 55-101%

4-Chloro-3-methylphenol: 96%/101% Recovery, QC Limits 62-100% N-Nitrosodi-n-propylamine: 105%/113% Recovery, QC Limits 55-100%

STAT Analysis Corporation

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

> **Report Date:** December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell **Client Sample ID:** WSS-SB50-001

Lab Order: 0411515 Tag Number:

Project: 32088 Willow Street Station- General Iron **Collection Date:** 11/29/2004 10:30:00 AM

Lab ID: 0411515-001A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50	35/8260E	B Prep	Date: 11/	30/2004 Analyst: PS
Acetone	0.082	0.065	mg/Kg-dry	1	12/4/2004
Benzene	0.13	0.013	mg/Kg-dry	1	12/4/2004
Bromodichloromethane	ND	0.013	mg/Kg-dry	1	12/4/2004
Bromoform	ND	0.013	mg/Kg-dry	1	12/4/2004
Bromomethane	ND	0.026	mg/Kg-dry	1	12/4/2004
2-Butanone	ND	0.026	mg/Kg-dry	1	12/4/2004
Carbon disulfide	ND	0.013	mg/Kg-dry	1	12/4/2004
Carbon tetrachloride	ND	0.013	mg/Kg-dry	1	12/4/2004
Chlorobenzene	ND	0.013	mg/Kg-dry	1	12/4/2004
Chloroethane	ND	0.026	mg/Kg-dry	1	12/4/2004
Chloroform	ND	0.013	mg/Kg-dry	1	12/4/2004
Chloromethane	ND	0.013	mg/Kg-dry	1	12/4/2004
Dibromochloromethane	ND	0.013	mg/Kg-dry	1	12/4/2004
1,1-Dichloroethane	ND	0.013	mg/Kg-dry	1	12/4/2004
1,2-Dichloroethane	ND	0.013	mg/Kg-dry	1	12/4/2004
1,1-Dichloroethene	ND	0.013	mg/Kg-dry	1	12/4/2004
cis-1,2-Dichloroethene	ND	0.013	mg/Kg-dry	1	12/4/2004
trans-1,2-Dichloroethene	ND	0.013	mg/Kg-dry	1	12/4/2004
1,2-Dichloropropane	ND	0.013	mg/Kg-dry	1	12/4/2004
cis-1,3-Dichloropropene	ND	0.013	mg/Kg-dry	1	12/4/2004
trans-1,3-Dichloropropene	ND	0.013	mg/Kg-dry	1	12/4/2004
Ethylbenzene	0.6	0.35	mg/Kg-dry	50	12/4/2004
2-Hexanone	ND	0.026	mg/Kg-dry	1	12/4/2004
4-Methyl-2-pentanone	ND	0.026	mg/Kg-dry	1	12/4/2004
Methylene chloride	ND	0.026	mg/Kg-dry	1	12/4/2004
Methyl tert-butyl ether	ND	0.013	mg/Kg-dry	1	12/4/2004
Styrene	ND	0.013	mg/Kg-dry	1	12/4/2004
1,1,2,2-Tetrachloroethane	ND	0.013	mg/Kg-dry	1	12/4/2004
Tetrachloroethene	ND	0.013	mg/Kg-dry	1	12/4/2004
Toluene	0.016	0.013	mg/Kg-dry	1	12/4/2004
1,1,1-Trichloroethane	ND	0.013	mg/Kg-dry	1	12/4/2004
1,1,2-Trichloroethane	ND	0.013	mg/Kg-dry	1	12/4/2004
Trichloroethene	ND	0.013	mg/Kg-dry	1	12/4/2004
Vinyl chloride	ND	0.013	mg/Kg-dry	1	12/4/2004
Xylenes, Total	2.3	0.7	mg/Kg-dry	50	12/4/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Page 1 of 12 H - Holding time exceeded

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB50-001

Lab Order: 0411515 Tag Number:

Project: 32088 Willow Street Station- General Iron Collection Date: 11/29/2004 10:30:00 AM

Lab ID: 0411515-001B **Matrix:** Soil

1.1 0.57 1.4 2.2 1.5	28 28 28 0.35 0.35 0.35 0.35 0.35	* m * m * m (SW3550B) m m m	ng/Kg-dry ng/Kg-dry ng/Kg-dry) Prep ng/Kg-dry ng/Kg-dry ng/Kg-dry	Date: 11/30/2004 1 1 1 Date: 12/2/2004 10 10 10	Analyst: JF 12/2/2004 12/2/2004 12/2/2004 Analyst: VS 12/3/2004 12/3/2004
200 500 SW8270 1.1 0.57 1.4 2.2 1.5 1.5	28 28 C-SIM (0.35 0.35 0.35 0.35 0.35	* m * m (SW3550B) m m m	ng/Kg-dry ng/Kg-dry Prep ng/Kg-dry ng/Kg-dry ng/Kg-dry	1 1 Date: 12/2/2004 10 10	12/2/2004 12/2/2004 Analyst: VS 12/3/2004
500 SW8270 1.1 0.57 1.4 2.2 1.5 1.5	28 C-SIM (0.35 0.35 0.35 0.35 0.35	* m (SW3550B) m m m	ng/Kg-dry Prep ng/Kg-dry ng/Kg-dry ng/Kg-dry	1 Date: 12/2/2004 10 10	12/2/2004 Analyst: VS 12/3/2004
\$W8270 1.1 0.57 1.4 2.2 1.5 1.5	0.35 0.35 0.35 0.35 0.35 0.35	(SW3550B) m m m m	Prep ng/Kg-dry ng/Kg-dry ng/Kg-dry	Date: 12/2/2004 10 10	Analyst: VS 12/3/2004
1.1 0.57 1.4 2.2 1.5	0.35 0.35 0.35 0.35 0.35	m m m	ng/Kg-dry ng/Kg-dry ng/Kg-dry	10 10	12/3/2004
0.57 1.4 2.2 1.5 1.5	0.35 0.35 0.35 0.35	m m	ng/Kg-dry ng/Kg-dry	10	
1.4 2.2 1.5 1.5	0.35 0.35 0.35	m m	ng/Kg-dry		12/3/2004
2.2 1.5 1.5	0.35 0.35	m		10	
1.5 1.5	0.35		a/Ka dru	10	12/3/2004
1.5			ng/Kg-dry	10	12/3/2004
	0.05	11	ng/Kg-dry	10	12/3/2004
	0.35	m	ng/Kg-dry	10	12/3/2004
0.83	0.35	m	ng/Kg-dry	10	12/3/2004
2.3	0.35	m	ng/Kg-dry	10	12/3/2004
2.1	0.35	m	ng/Kg-dry	10	12/3/2004
0.22	0.035	m	ng/Kg-dry	1	12/3/2004
2.9	0.35	m	ng/Kg-dry	10	12/3/2004
0.6	0.35	m	ng/Kg-dry	10	12/3/2004
0.75	0.35	m	ng/Kg-dry	10	12/3/2004
0.32	0.035	m	ng/Kg-dry	1	12/3/2004
2.3	0.35	m	ng/Kg-dry	10	12/3/2004
4.2	0.35	m	ng/Kg-dry	10	12/3/2004
SW8270	C (SW3	3550B)	Prep	Date: 12/2/2004	Analyst: PAB
ND	0.47		ng/Kg-dry	1	12/3/2004
ND	0.47	m	ng/Kg-dry	1	12/3/2004
ND	0.47			1	12/3/2004
ND	0.47	m	ng/Kg-dry	1	12/3/2004
ND	0.47	m	ng/Kg-dry	1	12/3/2004
ND	0.47			1	12/3/2004
ND	0.47			1	12/3/2004
ND	0.47			1	12/3/2004
ND	0.47			1	12/3/2004
ND	0.47	m	ng/Kg-dry	1	12/3/2004
ND	0.47			1	12/3/2004
ND	0.47			1	12/3/2004
ND	0.47			1	12/3/2004
ND	0.47			1	12/3/2004
ND	0.47			1	12/3/2004
ND	0.93			1	12/3/2004
	2.83 2.1 2.22 2.9 0.6 0.75 0.32 2.3 4.2 SW8270 ND ND ND ND ND ND ND ND ND ND ND ND ND	0.83	0.83	0.83 0.35 mg/Kg-dry 2.3 0.35 mg/Kg-dry 2.1 0.35 mg/Kg-dry 0.22 0.035 mg/Kg-dry 0.6 0.35 mg/Kg-dry 0.75 0.35 mg/Kg-dry 0.32 0.035 mg/Kg-dry 2.3 0.35 mg/Kg-dry 4.2 0.35 mg/Kg-dry ND 0.47 mg/Kg-dry ND 0.47 mg/Kg-dry ND 0.47 mg/Kg-dry ND 0.47 mg/Kg-dry ND 0.47 mg/Kg-dry ND 0.47 mg/Kg-dry ND 0.47 mg/Kg-dry ND 0.47 mg/Kg-dry ND 0.47 mg/Kg-dry ND 0.47 mg/Kg-dry ND 0.47 mg/Kg-dry ND 0.47 mg/Kg-dry ND 0.47 mg/Kg-dry ND 0.47 mg/Kg-dry <	0.83

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

R - RI D outside accepted recovery fill

E - Value above quantitation range H - Holding time exceeded

Page 2 of 12

2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB50-001

Lab Order: 0411515 Tag Number:

Project: 32088 Willow Street Station-General Iron Collection Date: 11/29/2004 10:30:00 AM

Lab ID: 0411515-001B **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	3550B) Pre	p Date: 12/2/2	004 Analyst: PAB
2,4-Dichlorophenol	ND	0.47	mg/Kg-dry	[,] 1	12/3/2004
Diethyl phthalate	ND	0.47	mg/Kg-dry	[,] 1	12/3/2004
Dimethyl phthalate	ND	0.47	mg/Kg-dry	[,] 1	12/3/2004
Di-n-butyl phthalate	ND	0.47	mg/Kg-dry	' 1	12/3/2004
2,4-Dimethylphenol	ND	0.47	mg/Kg-dry	' 1	12/3/2004
4,6-Dinitro-2-methylphenol	ND	2.3	mg/Kg-dry	' 1	12/3/2004
2,4-Dinitrophenol	ND	2.3	mg/Kg-dry	1	12/3/2004
2,4-Dinitrotoluene	ND	0.24	mg/Kg-dry	[,] 1	12/3/2004
2,6-Dinitrotoluene	ND	0.24	mg/Kg-dry	[,] 1	12/3/2004
Di-n-octyl phthalate	ND	0.47	mg/Kg-dry	[,] 1	12/3/2004
Hexachlorobenzene	ND	0.47	mg/Kg-dry	[,] 1	12/3/2004
Hexachlorobutadiene	ND	0.47	mg/Kg-dry	[,] 1	12/3/2004
Hexachlorocyclopentadiene	ND	0.47	mg/Kg-dry	1	12/3/2004
Hexachloroethane	ND	0.47	mg/Kg-dry	, 1	12/3/2004
Isophorone	ND	0.47	mg/Kg-dry	1	12/3/2004
2-Methylnaphthalene	0.95	0.47	mg/Kg-dry	[,] 1	12/3/2004
2-Methylphenol	ND	0.47	mg/Kg-dry	[,] 1	12/3/2004
4-Methylphenol	ND	0.47	mg/Kg-dry	[,] 1	12/3/2004
2-Nitroaniline	ND	2.3	mg/Kg-dry	, 1	12/3/2004
3-Nitroaniline	ND	2.3	mg/Kg-dry	, 1	12/3/2004
4-Nitroaniline	ND	2.3	mg/Kg-dry	[,] 1	12/3/2004
Nitrobenzene	ND	0.24	mg/Kg-dry	[,] 1	12/3/2004
2-Nitrophenol	ND	0.47	mg/Kg-dry	[,] 1	12/3/2004
4-Nitrophenol	ND	2.3	mg/Kg-dry	[,] 1	12/3/2004
N-Nitrosodi-n-propylamine	ND	0.24	mg/Kg-dry	[,] 1	12/3/2004
N-Nitrosodiphenylamine	ND	0.47	mg/Kg-dry	, 1	12/3/2004
2, 2'-oxybis(1-Chloropropane	ND	0.47	mg/Kg-dry	, 1	12/3/2004
Pentachlorophenol	ND	2.3	mg/Kg-dry	, 1	12/3/2004
Phenol	ND	0.47	mg/Kg-dry	, 1	12/3/2004
1,2,4-Trichlorobenzene	ND	0.47	mg/Kg-dry	1	12/3/2004
2,4,5-Trichlorophenol	ND	0.93	mg/Kg-dry	, 1	12/3/2004
2,4,6-Trichlorophenol	ND	0.47	mg/Kg-dry	1	12/3/2004
Percent Moisture	D2974	4	Pre	p Date: 11/30 /	2004 Analyst: RW
Percent Moisture	30.56	0.01	* wt%	1	12/1/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 3 of 12

2201 West Campbell Park Drive Chicago, IL 60612-3547 Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell **Client Sample ID:** WSS-SB50-002

Lab Order: 0411515 Tag Number:

Project: 32088 Willow Street Station- General Iron **Collection Date:** 11/29/2004 10:45:00 AM

Lab ID: 0411515-002A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed	
Volatile Organic Compounds by GC/MS	SW503	35/8260B	Prep	Date: 11/30/2004 Analyst: PS		
Acetone	ND	1.9	mg/Kg-dry	50	12/4/2004	
Benzene	2.9	0.75	mg/Kg-dry	100	12/5/2004	
Bromodichloromethane	ND	0.38	mg/Kg-dry	50	12/4/2004	
Bromoform	ND	0.38	mg/Kg-dry	50	12/4/2004	
Bromomethane	ND	0.75	mg/Kg-dry	50	12/4/2004	
2-Butanone	ND	0.75	mg/Kg-dry	50	12/4/2004	
Carbon disulfide	ND	0.38	mg/Kg-dry	50	12/4/2004	
Carbon tetrachloride	ND	0.38	mg/Kg-dry	50	12/4/2004	
Chlorobenzene	ND	0.38	mg/Kg-dry	50	12/4/2004	
Chloroethane	ND	0.75	mg/Kg-dry	50	12/4/2004	
Chloroform	ND	0.38	mg/Kg-dry	50	12/4/2004	
Chloromethane	ND	0.38	mg/Kg-dry	50	12/4/2004	
Dibromochloromethane	ND	0.38	mg/Kg-dry	50	12/4/2004	
1,1-Dichloroethane	ND	0.38	mg/Kg-dry	50	12/4/2004	
1,2-Dichloroethane	ND	0.38	mg/Kg-dry	50	12/4/2004	
1,1-Dichloroethene	ND	0.38	mg/Kg-dry	50	12/4/2004	
cis-1,2-Dichloroethene	ND	0.38	mg/Kg-dry	50	12/4/2004	
trans-1,2-Dichloroethene	ND	0.38	mg/Kg-dry	50	12/4/2004	
1,2-Dichloropropane	ND	0.38	mg/Kg-dry	50	12/4/2004	
cis-1,3-Dichloropropene	ND	0.38	mg/Kg-dry	50	12/4/2004	
trans-1,3-Dichloropropene	ND	0.38	mg/Kg-dry	50	12/4/2004	
Ethylbenzene	30	0.75	mg/Kg-dry	100	12/5/2004	
2-Hexanone	ND	0.75	mg/Kg-dry	50	12/4/2004	
4-Methyl-2-pentanone	ND	0.75	mg/Kg-dry	50	12/4/2004	
Methylene chloride	ND	0.75	mg/Kg-dry	50	12/4/2004	
Methyl tert-butyl ether	ND	0.38	mg/Kg-dry	50	12/4/2004	
Styrene	ND	0.38	mg/Kg-dry	50	12/4/2004	
1,1,2,2-Tetrachloroethane	ND	0.38	mg/Kg-dry	50	12/4/2004	
Tetrachloroethene	ND	0.38	mg/Kg-dry	50	12/4/2004	
Toluene	ND	0.38	mg/Kg-dry	50	12/4/2004	
1,1,1-Trichloroethane	ND	0.38	mg/Kg-dry	50	12/4/2004	
1,1,2-Trichloroethane	ND	0.38	mg/Kg-dry	50	12/4/2004	
Trichloroethene	ND	0.38	mg/Kg-dry	50	12/4/2004	
Vinyl chloride	ND	0.38	mg/Kg-dry	50	12/4/2004	
Xylenes, Total	21	1.5	mg/Kg-dry	100	12/5/2004	

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Page 4 of 12 H - Holding time exceeded

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB50-002

Lab Order: 0411515 Tag Number:

Project: 32088 Willow Street Station- General Iron Collection Date: 11/29/2004 10:45:00 AM

Lab ID: 0411515-002B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF I	Date Analyzed
Total Petroleum Hydrocarbons	SW80)15M (SW	/3580A)	Prep	Date: 11/30/2004	4 Analyst: JF
TPH (Gasoline)	110	26	*	mg/Kg-dry	1	12/2/2004
TPH (Diesel)	150	26	*	mg/Kg-dry	1	12/2/2004
TPH (Oil)	33	26	*	mg/Kg-dry	1	12/2/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550I	3) Prep	Date: 12/2/2004	Analyst: VS
Acenaphthene	3	0.35		mg/Kg-dry	10	12/3/2004
Acenaphthylene	0.44	0.35		mg/Kg-dry	10	12/3/2004
Anthracene	2.6	0.35		mg/Kg-dry	10	12/3/2004
Benz(a)anthracene	3.9	3.5		mg/Kg-dry	100	12/5/2004
Benzo(b)fluoranthene	2.4	0.35		mg/Kg-dry	10	12/3/2004
Benzo(k)fluoranthene	3.8	3.5		mg/Kg-dry	100	12/5/2004
Benzo(g,h,i)perylene	0.74	0.35		mg/Kg-dry	10	12/3/2004
Benzo(a)pyrene	4.4	3.5		mg/Kg-dry	100	12/5/2004
Chrysene	3.1	0.35		mg/Kg-dry	10	12/3/2004
Dibenz(a,h)anthracene	0.24	0.035		mg/Kg-dry	1	12/3/2004
Fluoranthene	7.2	3.5		mg/Kg-dry	100	12/5/2004
Fluorene	2.2	0.35		mg/Kg-dry	10	12/3/2004
Indeno(1,2,3-cd)pyrene	0.89	0.35		mg/Kg-dry	10	12/3/2004
Naphthalene	44	3.5		mg/Kg-dry	100	12/5/2004
Phenanthrene	8.7	3.5		mg/Kg-dry	100	12/5/2004
Pyrene	6.4	3.5		mg/Kg-dry	100	12/5/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	3550B)	Prep	Date: 12/2/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.46	-	mg/Kg-dry	1	12/3/2004
Bis(2-chloroethyl)ether	ND	0.46		mg/Kg-dry	1	12/3/2004
Bis(2-ethylhexyl)phthalate	ND	0.46		mg/Kg-dry	1	12/3/2004
4-Bromophenyl phenyl ether	ND	0.46		mg/Kg-dry	1	12/3/2004
Butyl benzyl phthalate	ND	0.46		mg/Kg-dry	1	12/3/2004
Carbazole	ND	0.46		mg/Kg-dry	1	12/3/2004
4-Chloro-3-methylphenol	ND	0.46		mg/Kg-dry	1	12/3/2004
4-Chloroaniline	ND	0.46		mg/Kg-dry	1	12/3/2004
2-Chloronaphthalene	ND	0.46		mg/Kg-dry	1	12/3/2004
2-Chlorophenol	ND	0.46		mg/Kg-dry	1	12/3/2004
4-Chlorophenyl phenyl ether	ND	0.46		mg/Kg-dry	1	12/3/2004
Dibenzofuran	1.2	0.46		mg/Kg-dry	1	12/3/2004
1,2-Dichlorobenzene	ND	0.46		mg/Kg-dry	1	12/3/2004
1,3-Dichlorobenzene	ND	0.46		mg/Kg-dry	1	12/3/2004
1,4-Dichlorobenzene	ND	0.46		mg/Kg-dry	1	12/3/2004
3,3'-Dichlorobenzidine	ND	0.91		mg/Kg-dry	1	12/3/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 5 of 12

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB50-002

Lab Order: 0411515 Tag Number:

Project: 32088 Willow Street Station- General Iron **Collection Date:** 11/29/2004 10:45:00 AM

Lab ID: 0411515-002B **Matrix:** Soil

Analyses	Result	RL Q	Qualifier Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW35	550B) Prep	Date: 12/2/200	4 Analyst: PAB
2,4-Dichlorophenol	ND	0.46	mg/Kg-dry	1	12/3/2004
Diethyl phthalate	ND	0.46	mg/Kg-dry	1	12/3/2004
Dimethyl phthalate	ND	0.46	mg/Kg-dry	1	12/3/2004
Di-n-butyl phthalate	ND	0.46	mg/Kg-dry	1	12/3/2004
2,4-Dimethylphenol	ND	0.46	mg/Kg-dry	1	12/3/2004
4,6-Dinitro-2-methylphenol	ND	2.2	mg/Kg-dry	1	12/3/2004
2,4-Dinitrophenol	ND	2.2	mg/Kg-dry	1	12/3/2004
2,4-Dinitrotoluene	ND	0.23	mg/Kg-dry	1	12/3/2004
2,6-Dinitrotoluene	ND	0.23	mg/Kg-dry	1	12/3/2004
Di-n-octyl phthalate	ND	0.46	mg/Kg-dry	1	12/3/2004
Hexachlorobenzene	ND	0.46	mg/Kg-dry	1	12/3/2004
Hexachlorobutadiene	ND	0.46	mg/Kg-dry	1	12/3/2004
Hexachlorocyclopentadiene	ND	0.46	mg/Kg-dry	1	12/3/2004
Hexachloroethane	ND	0.46	mg/Kg-dry	1	12/3/2004
Isophorone	ND	0.46	mg/Kg-dry	1	12/3/2004
2-Methylnaphthalene	7.5	0.46	mg/Kg-dry	1	12/3/2004
2-Methylphenol	ND	0.46	mg/Kg-dry	1	12/3/2004
4-Methylphenol	ND	0.46	mg/Kg-dry	1	12/3/2004
2-Nitroaniline	ND	2.2	mg/Kg-dry	1	12/3/2004
3-Nitroaniline	ND	2.2	mg/Kg-dry	1	12/3/2004
4-Nitroaniline	ND	2.2	mg/Kg-dry	1	12/3/2004
Nitrobenzene	ND	0.23	mg/Kg-dry	1	12/3/2004
2-Nitrophenol	ND	0.46	mg/Kg-dry	1	12/3/2004
4-Nitrophenol	ND	2.2	mg/Kg-dry	1	12/3/2004
N-Nitrosodi-n-propylamine	ND	0.23	mg/Kg-dry	1	12/3/2004
N-Nitrosodiphenylamine	ND	0.46	mg/Kg-dry	1	12/3/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.46	mg/Kg-dry	1	12/3/2004
Pentachlorophenol	ND	2.2	mg/Kg-dry	1	12/3/2004
Phenol	ND	0.46	mg/Kg-dry	1	12/3/2004
1,2,4-Trichlorobenzene	ND	0.46	mg/Kg-dry	1	12/3/2004
2,4,5-Trichlorophenol	ND	0.91	mg/Kg-dry	1	12/3/2004
2,4,6-Trichlorophenol	ND	0.46	mg/Kg-dry	1	12/3/2004
Percent Moisture	D2974	1	Prep	Date: 11/30/20	004 Analyst: RW
Percent Moisture	28.85	0.01	* wt%	1	12/1/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547 Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

> Report Date: December 10, 2004 December 15, 2004 **Print Date:**

Client: Burns & McDonnell **Client Sample ID:** WSS-SB50-003

Lab Order: 0411515 Tag Number:

Collection Date: 11/29/2004 11:05:00 AM Project: 32088 Willow Street Station-General Iron

Lab ID: 0411515-003A Matrix: Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS		35/8260E	B Prep		1/30/2004 Analyst: PS
Acetone	ND UJ	0.037	mg/Kg-dry	1	12/4/2004
Benzene	ND)	0.0073	mg/Kg-dry	1	12/4/2004
Bromodichloromethane	ND	0.0073	mg/Kg-dry	1	12/4/2004
Bromoform	ND	0.0073	mg/Kg-dry	1	12/4/2004
Bromomethane	ND	0.015	mg/Kg-dry	_1 .	12/4/2004
2-Butanone	ND	0.015	mg/Kg-dry	1	12/4/2004
Carbon disulfide	ND	0.0073	mg/Kg-dry	1	12/4/2004
Carbon tetrachloride	ND	0.0073	mg/Kg-dry	1	12/4/2004
Chlorobenzene	ND	0.0073	mg/Kg-dry	1	12/4/2004
Chloroethane	ND	0.015	mg/Kg-dry	1	12/4/2004
Chloroform	ND	00073	mg/Kg-dry	1	12/4/2004
Chloromethane	ND	0.0073	mg/Kg-dry	1	12/4/2004
Dibromochloromethane	ND	0.0073	mg/Kg-dry	1	12/4/2004
1,1-Dichloroethane	ND	0.0073	mg/Kg-dry	1	12/4/2004
1,2-Dichloroethane	ND	0.0073	mg/Kg-dry	1	12/4/2004
1,1-Dichloroethene	ND	00073	mg/Kg-dry	1	12/4/2004
cis-1,2-Dichloroethene	ND	0.0073	mg/Kg-dry	1	12/4/2004
trans-1,2-Dichloroethene	ND	0.0073	mg/Kg-dry	1	12/4/2004
1,2-Dichloropropane	ND	0.0073	mg/Kg-dry	1	12/4/2004
cis-1,3-Dichloropropene	ND	0.0073	mg/Kg-dry	1	12/4/2004
trans-1,3-Dichloropropene	ND 🔟	0.0073	mg/Kg-dry	1	12/4/2004
Ethylbenzene	0.56	0.35	mg/Kg-dry	50	12/4/2004
2-Hexanone	CU DN	0.015	mg/Kg-dry	1	12/4/2004
4-Methyl-2-pentanone	ND	0.015	mg/Kg-dry	1	12/4/2004
Methylene chloride	ND	0.015	mg/Kg-dry	1	12/4/2004
Methyl tert-butyl ether	ND	0.0073	mg/Kg-dry	1	12/4/2004
Styrene	ND	0.0073	mg/Kg-dry	1	12/4/2004
1,1,2,2-Tetrachloroethane	ND \	0.0073	mg/Kg-dry	1	12/4/2004
Tetrachloroethene	ND 🕹	0.0073	mg/Kg-dry	1	12/4/2004
Toluene	0.018 🗇	00073	mg/Kg-dry	1	12/4/2004
1,1,1-Trichloroethane	ND US	00073	mg/Kg-dry	1	12/4/2004
1,1,2-Trichloroethane	ND 1	0.0073	mg/Kg-dry	1	12/4/2004
Trichloroethene	ND	0.0073	mg/Kg-dry	1	12/4/2004
Vinyl chloride	ND -	0.0073	mg/Kg-dry	1	12/4/2004
Xylenes, Total	2.1 🕽	0.7	mg/Kg-dry	50	12/4/2004
U)= estimated non-detect J= estimated value;				enj.	SFA
Je estimate value;	PON 500	vogat	recovery.s	FA,	

ND - Not Detected at the Reporting Limit Qualifiers:

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Page 7 of 12 H - Holding time exceeded

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB50-003

Lab Order: 0411515 Tag Number:

Project: 32088 Willow Street Station-General Iron Collection Date: 11/29/2004 11:05:00 AM

Lab ID: 0411515-003B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW80)15M (SW	/3580A)	Prep	Date: 11/30/200	4 Analyst: JF
TPH (Gasoline)	ND	26	*	mg/Kg-dry	1	12/2/2004
TPH (Diesel)	31	26	*	mg/Kg-dry	1	12/2/2004
TPH (Oil)	ND	26	*	mg/Kg-dry	1	12/2/2004
Polynuclear Aromatic Hydrocarbons	SW82	270C-SIM	(SW3550I	3) Prep	Date: 12/2/2004	Analyst: VS
Acenaphthene	0.086	0.034		mg/Kg-dry	1	12/3/2004
Acenaphthylene	ND	0.034		mg/Kg-dry	1	12/3/2004
Anthracene	0.18	0.034		mg/Kg-dry	1	12/3/2004
Benz(a)anthracene	0.42	0.34		mg/Kg-dry	10	12/5/2004
Benzo(b)fluoranthene	0.27	0.034		mg/Kg-dry	1	12/3/2004
Benzo(k)fluoranthene	0.38	0.34		mg/Kg-dry	10	12/5/2004
Benzo(g,h,i)perylene	0.077	0.034		mg/Kg-dry	1	12/3/2004
Benzo(a)pyrene	0.46	0.34		mg/Kg-dry	10	12/5/2004
Chrysene	0.42	0.34		mg/Kg-dry	10	12/5/2004
Dibenz(a,h)anthracene	0.037	0.034		mg/Kg-dry	1	12/3/2004
Fluoranthene	0.66	0.34		mg/Kg-dry	10	12/5/2004
Fluorene	0.098	0.034		mg/Kg-dry	1	12/3/2004
Indeno(1,2,3-cd)pyrene	0.098	0.034		mg/Kg-dry	1	12/3/2004
Naphthalene	0.52	0.34		mg/Kg-dry	10	12/5/2004
Phenanthrene	0.46	0.34		mg/Kg-dry	10	12/5/2004
Pyrene	0.55	0.34		mg/Kg-dry	10	12/5/2004
Semivolatile Organic Compounds by GC/MS	SW82	270C (SW	3550B)	Prep	Date: 12/2/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.45	=	mg/Kg-dry	1	12/3/2004
Bis(2-chloroethyl)ether	ND	0.45		mg/Kg-dry	1	12/3/2004
Bis(2-ethylhexyl)phthalate	ND	0.45		mg/Kg-dry	1	12/3/2004
4-Bromophenyl phenyl ether	ND	0.45		mg/Kg-dry	1	12/3/2004
Butyl benzyl phthalate	ND	0.45		mg/Kg-dry	1	12/3/2004
Carbazole	ND	0.45		mg/Kg-dry	1	12/3/2004
4-Chloro-3-methylphenol	ND	0.45		mg/Kg-dry	1	12/3/2004
4-Chloroaniline	ND	0.45		mg/Kg-dry	1	12/3/2004
2-Chloronaphthalene	ND	0.45		mg/Kg-dry	1	12/3/2004
2-Chlorophenol	ND	0.45		mg/Kg-dry	1	12/3/2004
4-Chlorophenyl phenyl ether	ND	0.45		mg/Kg-dry	1	12/3/2004
Dibenzofuran	ND	0.45		mg/Kg-dry	1	12/3/2004
1,2-Dichlorobenzene	ND	0.45		mg/Kg-dry	1	12/3/2004
1,3-Dichlorobenzene	ND	0.45		mg/Kg-dry	1	12/3/2004
1,4-Dichlorobenzene	ND	0.45		mg/Kg-dry	1	12/3/2004
3,3´-Dichlorobenzidine	ND	0.89		mg/Kg-dry	1	12/3/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB50-003

Lab Order: 0411515 Tag Number:

Project: 32088 Willow Street Station-General Iron Collection Date: 11/29/2004 11:05:00 AM

Lab ID: 0411515-003B **Matrix:** Soil

Analyses	Result	RL (Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW3	550B)	Prep	Date: 12/2/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.45	mg	/Kg-dry	1	12/3/2004
Diethyl phthalate	ND	0.45	mg	/Kg-dry	1	12/3/2004
Dimethyl phthalate	ND	0.45	mg	/Kg-dry	1	12/3/2004
Di-n-butyl phthalate	ND	0.45	mg	/Kg-dry	1	12/3/2004
2,4-Dimethylphenol	ND	0.45	mg	/Kg-dry	1	12/3/2004
4,6-Dinitro-2-methylphenol	ND	2.2	mg	/Kg-dry	1	12/3/2004
2,4-Dinitrophenol	ND	2.2	mg	/Kg-dry	1	12/3/2004
2,4-Dinitrotoluene	ND	0.23	mg	/Kg-dry	1	12/3/2004
2,6-Dinitrotoluene	ND	0.23	mg	/Kg-dry	1	12/3/2004
Di-n-octyl phthalate	ND	0.45	mg	/Kg-dry	1	12/3/2004
Hexachlorobenzene	ND	0.45	mg	/Kg-dry	1	12/3/2004
Hexachlorobutadiene	ND	0.45	mg	/Kg-dry	1	12/3/2004
Hexachlorocyclopentadiene	ND	0.45	mg	/Kg-dry	1	12/3/2004
Hexachloroethane	ND	0.45	mg	/Kg-dry	1	12/3/2004
Isophorone	ND	0.45	mg	/Kg-dry	1	12/3/2004
2-Methylnaphthalene	ND	0.45	mg	/Kg-dry	1	12/3/2004
2-Methylphenol	ND	0.45	mg	/Kg-dry	1	12/3/2004
4-Methylphenol	ND	0.45	mg	/Kg-dry	1	12/3/2004
2-Nitroaniline	ND	2.2	mg	/Kg-dry	1	12/3/2004
3-Nitroaniline	ND	2.2	mg	/Kg-dry	1	12/3/2004
4-Nitroaniline	ND	2.2	mg	/Kg-dry	1	12/3/2004
Nitrobenzene	ND	0.23	mg	/Kg-dry	1	12/3/2004
2-Nitrophenol	ND	0.45	mg	/Kg-dry	1	12/3/2004
4-Nitrophenol	ND	2.2	mg	/Kg-dry	1	12/3/2004
N-Nitrosodi-n-propylamine	ND	0.23	mg	/Kg-dry	1	12/3/2004
N-Nitrosodiphenylamine	ND	0.45	mg	/Kg-dry	1	12/3/2004
2, 2'-oxybis(1-Chloropropane	ND	0.45	mg	/Kg-dry	1	12/3/2004
Pentachlorophenol	ND	2.2	mg	/Kg-dry	1	12/3/2004
Phenol	ND	0.45	mg	/Kg-dry	1	12/3/2004
1,2,4-Trichlorobenzene	ND	0.45	mg	/Kg-dry	1	12/3/2004
2,4,5-Trichlorophenol	ND	0.89	mg	/Kg-dry	1	12/3/2004
2,4,6-Trichlorophenol	ND	0.45	mg	/Kg-dry	1	12/3/2004
Percent Moisture	D2974	ļ		Prep	Date: 11/30/200	4 Analyst: RW
Percent Moisture	27.86	0.01	*	wt%	1	12/1/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB56-001

Lab Order: 0411515 Tag Number:

Project: 32088 Willow Street Station-General Iron Collection Date: 11/29/2004 3:20:00 PM

Lab ID: 0411515-004A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50)35/8260B	Prep	Date: 11	/30/2004 Analyst: PS
Acetone	ND	0.028	mg/Kg-dry	1	12/4/2004
Benzene	ND	0.0056	mg/Kg-dry	1	12/4/2004
Bromodichloromethane	ND	0.0056	mg/Kg-dry	1	12/4/2004
Bromoform	ND	0.0056	mg/Kg-dry	1	12/4/2004
Bromomethane	ND	0.011	mg/Kg-dry	1	12/4/2004
2-Butanone	ND	0.011	mg/Kg-dry	1	12/4/2004
Carbon disulfide	ND	0.0056	mg/Kg-dry	1	12/4/2004
Carbon tetrachloride	ND	0.0056	mg/Kg-dry	1	12/4/2004
Chlorobenzene	ND	0.0056	mg/Kg-dry	1	12/4/2004
Chloroethane	ND	0.011	mg/Kg-dry	1	12/4/2004
Chloroform	ND	0.0056	mg/Kg-dry	1	12/4/2004
Chloromethane	ND	0.0056	mg/Kg-dry	1	12/4/2004
Dibromochloromethane	ND	0.0056	mg/Kg-dry	1	12/4/2004
1,1-Dichloroethane	ND	0.0056	mg/Kg-dry	1	12/4/2004
1,2-Dichloroethane	ND	0.0056	mg/Kg-dry	1	12/4/2004
1,1-Dichloroethene	ND	0.0056	mg/Kg-dry	1	12/4/2004
cis-1,2-Dichloroethene	ND	0.0056	mg/Kg-dry	1	12/4/2004
trans-1,2-Dichloroethene	ND	0.0056	mg/Kg-dry	1	12/4/2004
1,2-Dichloropropane	ND	0.0056	mg/Kg-dry	1	12/4/2004
cis-1,3-Dichloropropene	ND	0.0056	mg/Kg-dry	1	12/4/2004
trans-1,3-Dichloropropene	ND	0.0056	mg/Kg-dry	1	12/4/2004
Ethylbenzene	ND	0.0056	mg/Kg-dry	1	12/4/2004
2-Hexanone	ND	0.011	mg/Kg-dry	1	12/4/2004
4-Methyl-2-pentanone	ND	0.011	mg/Kg-dry	1	12/4/2004
Methylene chloride	ND	0.011	mg/Kg-dry	1	12/4/2004
Methyl tert-butyl ether	ND	0.0056	mg/Kg-dry	1	12/4/2004
Styrene	ND	0.0056	mg/Kg-dry	1	12/4/2004
1,1,2,2-Tetrachloroethane	ND	0.0056	mg/Kg-dry	1	12/4/2004
Tetrachloroethene	ND	0.0056	mg/Kg-dry	1	12/4/2004
Toluene	ND	0.0056	mg/Kg-dry	1	12/4/2004
1,1,1-Trichloroethane	ND	0.0056	mg/Kg-dry	1	12/4/2004
1,1,2-Trichloroethane	ND	0.0056	mg/Kg-dry	1	12/4/2004
Trichloroethene	ND	0.0056	mg/Kg-dry	1	12/4/2004
Vinyl chloride	ND	0.0056	mg/Kg-dry	1	12/4/2004
Xylenes, Total	ND	0.011	mg/Kg-dry	1	12/4/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 10 of 12

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB56-001

Lab Order: 0411515 Tag Number:

Project: 32088 Willow Street Station-General Iron Collection Date: 11/29/2004 3:20:00 PM

Lab ID: 0411515-004B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW80)15M (SW	/3580A)	Prep	Date: 1	1/30/2004 Analyst: JF
TPH (Gasoline)	ND	23	* r	ng/Kg-dry	1	12/2/2004
TPH (Diesel)	ND	23	* r	ng/Kg-dry	1	12/2/2004
TPH (Oil)	ND	23	* r	ng/Kg-dry	1	12/2/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550B) Prep	Date: 1	2/2/2004 Analyst: VS
Acenaphthene	ND	0.031	r	ng/Kg-dry	1	12/3/2004
Acenaphthylene	ND	0.031	r	ng/Kg-dry	1	12/3/2004
Anthracene	ND	0.031	r	ng/Kg-dry	1	12/3/2004
Benz(a)anthracene	ND	0.031	r	ng/Kg-dry	1	12/3/2004
Benzo(b)fluoranthene	ND	0.031	r	ng/Kg-dry	1	12/3/2004
Benzo(k)fluoranthene	ND	0.031	r	ng/Kg-dry	1	12/3/2004
Benzo(g,h,i)perylene	ND	0.031	r	ng/Kg-dry	1	12/3/2004
Benzo(a)pyrene	ND	0.031	r	ng/Kg-dry	1	12/3/2004
Chrysene	ND	0.031	r	ng/Kg-dry	1	12/3/2004
Dibenz(a,h)anthracene	ND	0.031		ng/Kg-dry	1	12/3/2004
Fluoranthene	ND	0.031		ng/Kg-dry	1	12/3/2004
Fluorene	ND	0.031		ng/Kg-dry	1	12/3/2004
Indeno(1,2,3-cd)pyrene	ND	0.031	r	ng/Kg-dry	1	12/3/2004
Naphthalene	ND	0.031		ng/Kg-dry	1	12/3/2004
Phenanthrene	0.037	0.031		ng/Kg-dry	1	12/3/2004
Pyrene	ND	0.031		ng/Kg-dry	1	12/3/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	3550B)	Prep	Date: 1	2/2/2004 Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.4	=	ng/Kg-dry	1	12/3/2004
Bis(2-chloroethyl)ether	ND	0.4		ng/Kg-dry	1	12/3/2004
Bis(2-ethylhexyl)phthalate	ND	0.4		ng/Kg-dry	1	12/3/2004
4-Bromophenyl phenyl ether	ND	0.4		ng/Kg-dry	1	12/3/2004
Butyl benzyl phthalate	ND	0.4		ng/Kg-dry	1	12/3/2004
Carbazole	ND	0.4		ng/Kg-dry	1	12/3/2004
4-Chloro-3-methylphenol	ND	0.4		ng/Kg-dry	1	12/3/2004
4-Chloroaniline	ND	0.4		ng/Kg-dry	1	12/3/2004
2-Chloronaphthalene	ND	0.4		ng/Kg-dry	1	12/3/2004
2-Chlorophenol	ND	0.4		ng/Kg-dry	1	12/3/2004
4-Chlorophenyl phenyl ether	ND	0.4		ng/Kg-dry	1	12/3/2004
Dibenzofuran	ND	0.4		ng/Kg-dry	1	12/3/2004
1,2-Dichlorobenzene	ND	0.4		ng/Kg-dry	1	12/3/2004
1,3-Dichlorobenzene	ND	0.4		ng/Kg-dry	1	12/3/2004
1,4-Dichlorobenzene	ND	0.4		ng/Kg-dry	1	12/3/2004
3,3'-Dichlorobenzidine	ND	0.81		ng/Kg-dry	1	12/3/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded Page

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2201 West Campbell Park Drive Chicago, IL 60612-3547 Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB56-001

Lab Order: 0411515 Tag Number:

Project: 32088 Willow Street Station-General Iron Collection Date: 11/29/2004 3:20:00 PM

Lab ID: 0411515-004B **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	3550B) Pre	p Date: 12/ 2	2/2004 Analyst: PAB
2,4-Dichlorophenol	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
Diethyl phthalate	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
Dimethyl phthalate	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
Di-n-butyl phthalate	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
2,4-Dimethylphenol	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
4,6-Dinitro-2-methylphenol	ND	2	mg/Kg-dry	/ 1	12/3/2004
2,4-Dinitrophenol	ND	2	mg/Kg-dry	/ 1	12/3/2004
2,4-Dinitrotoluene	ND	0.21	mg/Kg-dry	/ 1	12/3/2004
2,6-Dinitrotoluene	ND	0.21	mg/Kg-dry	/ 1	12/3/2004
Di-n-octyl phthalate	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
Hexachlorobenzene	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
Hexachlorobutadiene	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
Hexachlorocyclopentadiene	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
Hexachloroethane	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
Isophorone	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
2-Methylnaphthalene	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
2-Methylphenol	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
4-Methylphenol	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
2-Nitroaniline	ND	2	mg/Kg-dry	/ 1	12/3/2004
3-Nitroaniline	ND	2	mg/Kg-dry	/ 1	12/3/2004
4-Nitroaniline	ND	2	mg/Kg-dry	/ 1	12/3/2004
Nitrobenzene	ND	0.21	mg/Kg-dry	/ 1	12/3/2004
2-Nitrophenol	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
4-Nitrophenol	ND	2	mg/Kg-dry	/ 1	12/3/2004
N-Nitrosodi-n-propylamine	ND	0.21	mg/Kg-dry	/ 1	12/3/2004
N-Nitrosodiphenylamine	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
Pentachlorophenol	ND	2	mg/Kg-dry	/ 1	12/3/2004
Phenol	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
1,2,4-Trichlorobenzene	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
2,4,5-Trichlorophenol	ND	0.81	mg/Kg-dry	/ 1	12/3/2004
2,4,6-Trichlorophenol	ND	0.4	mg/Kg-dry	/ 1	12/3/2004
Percent Moisture	D297	4	Pre	p Date: 11/ 3	30/2004 Analyst: RW
Percent Moisture	19.19	0.01	* wt%	1	12/1/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

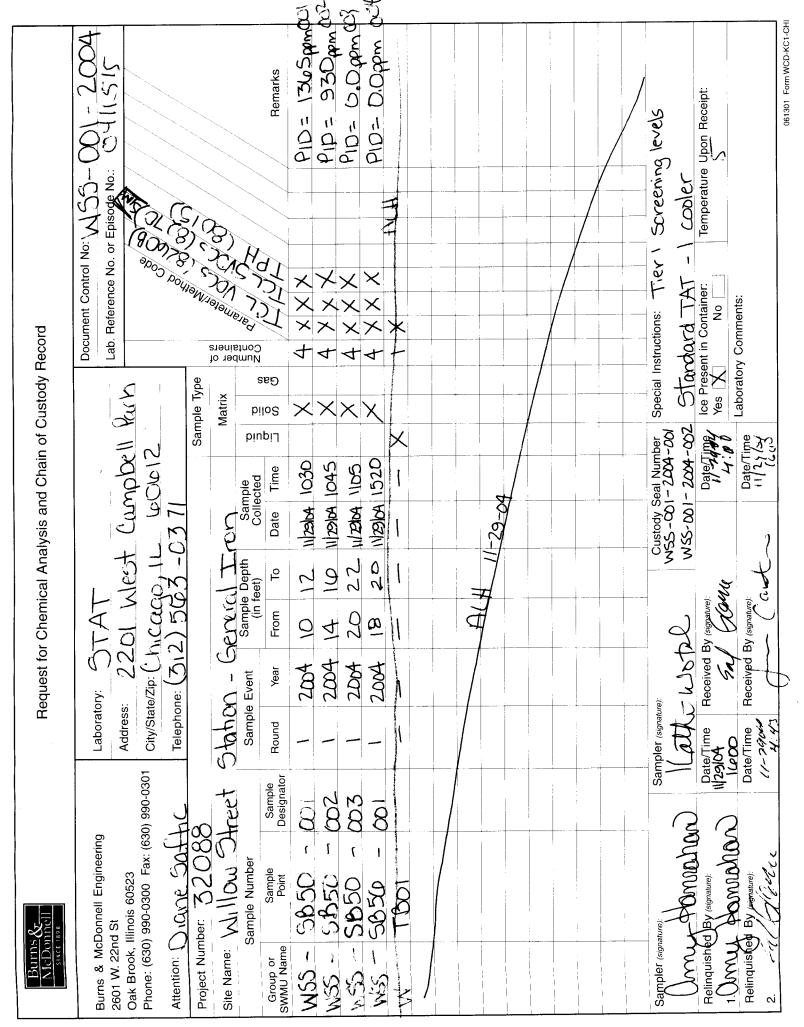
R - RPD outside accepted recovery limits

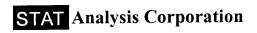
K - KI D outside accepted recovery film

E - Value above quantitation range

H - Holding time exceeded

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Sample Receipt Checklist

Client Name B&M				Date and Tim	e Received:	11/29/2004
Work Order Numbe 0411515				Received by:	JC	
Checklist completed by:	rt // Date	/24/	- 1	Reviewed by:	Initials	12 604 Date
Matrix	Carrier name	STAT A	<u>Analysis</u>			
Shipping container/cooler in good condition?		Yes ⊻		No 🗌	Not Present	
Custody seals intact on shippping container/cook	er?	Yes 🔽		No 🗌	Not Present	
Custody seals intact on sample bottles?		Yes [No 🗌	Not Present 🗹	
Chain of custody present?		Yes 🛂		No 🗌		
Chain of custody signed when relinquished and r	eceived?	Yes 💌		No 🗌		
Chain of custody agrees with sample labels?		Yes 🛂		No 🗆		
Samples in proper container/bottle?		Yes 🔽		No 🗌		
Sample containers intact?		Yes 🔽		No 🗌		
Sufficient sample volume for indicated test?		Yes 🛚		No 🗆		
All samples received within holding time?		Yes 🛚		No 🗌		
Container or Temp Blank temperature in complia	ince?	Yes 🕨		No 🗌	Temperature	5 °C
Water - VOA vials have zero headspace?	No VOA vials subn	nitted [Yes 🗌	No 📙	
Water - Samples properly preserved/ pH checke	d?	Yes		No 🗌		
	Adjusted?		Che	cked by		
Any No and/or NA (not applicable) response mu	st be detailed in the c	comment	s section	below.		
Client contacted	Date contacted:			Pers	on contacted	
Contacted by:	Regarding					
Comments: SAMPLE W	TBOI N	51	PRES	ent B	U COOUER	
						
Corrective Action						

CLIENT: Burns & McDonnell

Work Order: 0411515

Project: 32088 Willow Street Station- General Iron

Test No: SW5035/8260B Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Date: 15-Dec-04

Sample ID	BR4FBZ	BZMED8	DBFM	DCA12D4	
VBLK120404-2	108	101	98.4	113	
VLCS120404-2	103	100	101	105	
VLCSD120404-2	100	102	100	104	
0411515-001A:50	103	100	101	97.0	
0411515-002A:50	95.8	101	101	98.9	
0411515-003A:50	101	101	105	103	
0411515-004A	105	98.8	101	109	
0411515-003A	70.9	82.4 *	100	116	
0411515-001A	84.1	92.8	100	97.3	
VBLK120504-2	109	97.1	103	108	
VLCS120504-2	102	99.9	102	97.9	
VLCSD120504-2	102	98.5	103	104	
0411515-002A:100	102	99.1	105	103	
0411515-003AR	77.1	83.4 *	100	105	

Acronym		Surrogate		QC Limits	
BR4FBZ BZMED8 DBFM DCA12D4	=	4-Bromofluo Toluene-d8 Dibromofluor 1,2-Dichloro	romethane	63-110 85-110 83-119 84-129	

^{*} Surrogate recovery outside acceptance limits

CLIENT: Burns & McDonnell

Work Order: 0411515

Project: 32088 Willow Street Station- General Iron

Test No: SW8270C Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Date: 15-Dec-04

Sample ID	CLPH2D4	DCBZ12D4	NO2BZD5	PH246BR	PH2F	PHD5	PHEN2F	PHEND14
MB-12058-SVOC	67.4	61.8	78.6	84.8	67.8	79.8	73.1	87.2
0411515-004B	71.6	69.4	80.6	72.1	72.5	80.9	81.3	56.7
0411515-003B	66.2	62.0	77.2	73.1	64.3	76.8	79.1	57.2
0411515-003BMS	72.0	68.8	88.5	82.3	72.4	81.9	84.1	60.0
0411515-003BMSD	78.1	76.4	96.9	88.3	79.1	89.7	88.9	62.3
0411515-001B	96.1	90.4	113	135 *	83.2	110	111	90.8
0411515-002B	77.4	70.9	91.4	85.2	73.4	87.8	104	54.9
LCS-12058-SVOC	72.5	65.5	86.2	90.5	71.2	86.6	77.9	123

Acronym		Surrogate	QC Limits
		2 22 2 Sg. 11	Q 3
CLPH2D4	=	2-Chlorophenol-d4	20-130
DCBZ12D4	=	1,2-Dichlorobenzene-d4	20-130
NO2BZD5	=	Nitrobenzene-d5	23-120
PH246BR	=	2,4,6-Tribromophenol	19-122
PH2F	=	2-Fluorophenol	25-121
PHD5	=	Phenol-d5	24-113
PHEN2F	=	2-Fluorobiphenyl	30-115
PHEND14	=	4-Terphenyl-d14	18-137

^{*} Surrogate recovery outside acceptance limits

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 12/2/2004 12:17:21
Prep End Date: 12/2/2004 7:18:49 P

Prep Factor Units:

Prep Batch 12058 Prep Code: 3550_SVOC Technician: JT mL/Kg

Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0411515-001B	Soil		0.03056	0	0	1	32.723	12/2/2004	12/2/2004
0411515-002B	Soil		0.03052	0	0	1	32.765	12/2/2004	12/2/2004
0411515-003B	Soil		0.03072	0	0	1	32.552	12/2/2004	12/2/2004
0411515-003BMS	Soil		0.03079	0	0	1	32.478	12/2/2004	12/2/2004
0411515-003BMSD	Soil		0.0308	0	0	1	32.468	12/2/2004	12/2/2004
0411515-004B	Soil		0.03031	0	0	1	32.992	12/2/2004	12/2/2004
0412026-001A	Soil		0.03064	0	0	1	32.637	12/2/2004	12/2/2004
0412026-002A	Soil		0.03022	0	0	1	33.091	12/2/2004	12/2/2004
0412026-003A	Soil		0.03021	0	0	1	33.102	12/2/2004	12/2/2004
0412026-004A	Soil		0.03019	0	0	1	33.124	12/2/2004	12/2/2004
0412026-005A	Soil		0.03034	0	0	1	32.960	12/2/2004	12/2/2004
0412026-006A	Soil		0.03072	0	0	1	32.552	12/2/2004	12/2/2004
0412026-007A	Soil		0.02486	0	0	1	40.225	12/2/2004	12/2/2004
0412026-008A	Soil		0.03079	0	0	1	32.478	12/2/2004	12/2/2004
0412049-001A	Soil		0.03029	0	0	1	33.014	12/2/2004	12/2/2004
0412049-002A	Soil		0.03035	0	0	1	32.949	12/2/2004	12/2/2004
0412049-003A	Soil		0.03047	0	0	1	32.819	12/2/2004	12/2/2004
LCS-12058-SVOC			0.03	0	0	1	33.333	12/2/2004	12/2/2004
MB-12058-SVOC			0.03	0	0	1	33.333	12/2/2004	12/2/2004

CLIENT: Burns & McDonnell

Work Order: 0411515

Project: 32088 Willow Street Station- General Iron
Test No: SW8270C-SIM Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Date: 15-Dec-04

Sample ID	DCBZ12D4	NO2BZD5	PHEN2F	PHEND14	
MB-12057-PNA	64.1	71.1	75.6	91.0	
LCS-12057-PNA	56.1	66.9	66.5	88.8	
0411515-003B	56.4	74.6	56.6	60.7	
0411515-004B	67.2	84.6	61.1	64.2	
0411515-001B	55.5	69.5	53.3	72.5	
0411515-002B	61.7	81.2	78.5	64.2	
0412026-003AMS	72.9	95.4	80.2	85.2	
0412026-003AMSD	66.5	87.0	76.8	83.8	

Acronym		Surrogate		QC Limits	
DCBZ12D4 NO2BZD5 PHEN2F PHEND14	=	1,2-Dichlorol Nitrobenzene 2-Fluorobiph 4-Terphenyl-	e-d5 ienyl	20-130 23-120 30-115 18-137	

^{*} Surrogate recovery outside acceptance limits

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 12/2/2004 12:15:08
Prep End Date: 12/3/2004 12:27:48

Prep Factor Units:

Prep Batch 12057 Prep Code: 3550_PNA Technician: JT mL/Kg

Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0411515-001B	Soil		0.03056	0	0	1	32.723	12/2/2004	12/2/2004
0411515-002B	Soil		0.03055	0	0	1	32.733	12/2/2004	12/2/2004
0411515-003B	Soil		0.03072	0	0	1	32.552	12/2/2004	12/2/2004
0411515-004B	Soil		0.03031	0	0	1	32.992	12/2/2004	12/2/2004
0412026-001A	Soil		0.03064	0	0	1	32.637	12/2/2004	12/2/2004
0412026-002A	Soil		0.03022	0	0	1	33.091	12/2/2004	12/2/2004
0412026-003A	Soil		0.03021	0	0	1	33.102	12/2/2004	12/2/2004
0412026-003AMS	Soil		0.03012	0	0	1	33.201	12/2/2004	12/2/2004
0412026-003AMSD	Soil		0.03046	0	0	1	32.830	12/2/2004	12/2/2004
0412026-004A	Soil		0.03019	0	0	1	33.124	12/2/2004	12/2/2004
0412026-005A	Soil		0.03034	0	0	1	32.960	12/2/2004	12/2/2004
0412026-006A	Soil		0.03072	0	0	1	32.552	12/2/2004	12/2/2004
0412026-007A	Soil		0.02486	0	0	1	40.225	12/2/2004	12/2/2004
0412026-008A	Soil		0.03079	0	0	1	32.478	12/2/2004	12/2/2004
0412049-001A	Soil		0.03029	0	0	1	33.014	12/2/2004	12/2/2004
0412049-002A	Soil		0.03035	0	0	1	32.949	12/2/2004	12/2/2004
0412049-003A	Soil		0.03047	0	0	1	32.819	12/2/2004	12/2/2004
0412057-001B	Soil		0.03059	0	0	1	32.690	12/2/2004	12/2/2004
0412062-001A	Soil		0.03028	0	0	1	33.025	12/2/2004	12/3/2004
0412062-002A	Soil	·	0.03035	0	0	1	32.949	12/2/2004	12/3/2004
0412062-003A	Soil		0.03021	0	0	1	33.102	12/2/2004	12/3/2004
LCS-12057-PNA			0.03	0	0	1	33.333	12/2/2004	12/2/2004
MB-12057-PNA			0.03	0	0	1	33.333	12/2/2004	12/2/2004

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 11/29/2004 9:00:27
Prep End Date: 11/30/2004 3:38:07

Prep Factor Units:

Prep Batch 11997 Prep Code: 3580_TPH Technician: CDC mL/Kg

Frep Batch 11991	г гер С	100de. 3300_1F11 16	cillician. CDC			,9		
Sample ID	Matrix	pH SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0411434-001B	Soil	0.0051	0	0	5	980.392	11/29/2004	11/29/2004
0411434-002B	Soil	0.00521	0	0	5	959.693	11/29/2004	11/29/2004
0411491-001A	Soil	0.00524	0	0	5	954.198	11/29/2004	11/29/2004
0411491-002A	Soil	0.00517	0	0	5	967.118	11/29/2004	11/29/2004
0411491-003A	Soil	0.00522	0	0	5	957.854	11/29/2004	11/29/2004
0411491-004A	Soil	0.00529	0	0	5	945.180	11/29/2004	11/29/2004
0411491-005A	Soil	0.00515	0	0	5	970.874	11/29/2004	11/29/2004
0411491-006A	Soil	0.00528	0	0	5	946.970	11/29/2004	11/29/2004
0411491-007A	Soil	0.00532	0	0	5	939.850	11/29/2004	11/29/2004
0411491-008A	Soil	0.00536	0	0	5	932.836	11/29/2004	11/29/2004
0411491-009A	Soil	0.00517	0	0	5	967.118	11/29/2004	11/29/2004
0411491-009AMS	Soil	0.00533	0	0	5	938.086	11/29/2004	11/29/2004
0411491-009AMSD	Soil	0.00526	0	0	5	950.570	11/29/2004	11/29/2004
0411491-010A	Soil	0.00518	0	0	5	965.251	11/29/2004	11/29/2004
0411491-014A	Soil	0.00519	0	0	5	963.391	11/29/2004	11/29/2004
0411491-015A	Soil	0.00537	0	0	5	931.099	11/29/2004	11/29/2004
0411491-016A	Soil	0.00532	0	0	5	939.850	11/29/2004	11/29/2004
0411515-001B	Soil	0.00518	0	0	5	965.251	11/30/2004	11/30/2004
0411515-002B	Soil	0.00534	0	0	5	936.330	11/30/2004	11/30/2004
0411515-003B	Soil	0.00531	0	0	5	941.620	11/30/2004	11/30/2004
0411515-004B	Soil	0.00536	0	0	5	932.836	11/30/2004	11/30/2004
LCS-11997-TPH		0.005	0	0	5	1000.000	11/29/2004	11/29/2004
MB-11997-TPH		0.005	0	0	5	1000.000	11/29/2004	11/29/2004
		-						

Date: *December 15, 2004*

CLIENT: Burns & McDonnell

Work Order: 0411515

Project: 32088 Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 11997

Sample ID MB-11997-TPH	SampType:	MRIK	TestCod	۵· TD H	Units: mg/Kg		Pren Date	e: 11/29/	2004	Run ID: GC	-FID_04112	۵۸
											_	J A
Client ID: ZZZZZ	Batch ID:	11997	I estin	o: SW8015N	_		Analysis Dat	e: 11/29/	2004	SeqNo: 31	5883	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		ND	20									*
TPH (Diesel)		ND	20									*
TPH (Oil)		ND	20									*
Sample ID LCS-11997-TPH	SampType:	LCS	TestCod	e: TPH	Units: mg/Kg		Prep Date	e: 11/29/ 2	2004	Run ID: GC	-FID_04112	9A
Client ID: ZZZZZ	Batch ID:	11997	TestN	o: SW8015N	1		Analysis Dat	e: 11/29/	2004	SeqNo: 31	5884	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		162.9	20	200	0	81.5	30	150	0	0		*
TPH (Diesel)		161.9	20	200	0	80.9	30	150	0	0		*
TPH (Oil)		185.1	20	200	0	92.6	30	150	0	0		*
Sample ID 0411491-009AMS	SampType:	MS	TestCod	e: TPH	Units: mg/Kg	-dry	Prep Date	e: 11/29/	2004	Run ID: GC	-FID_04112	9A
Client ID: ZZZZZ	Batch ID:	11997	TestN	o: SW8015N	1		Analysis Dat	e: 11/30/	2004	SeqNo: 31	5896	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		239.8	23	234.4	0	102	30	150	0	0		*
TPH (Diesel)		240.8	23	234.4	1.24	102	30	150	0	0		*
TPH (Oil)		226.5	23	234.4	9.492	92.6	30	150	0	0		*
Sample ID 0411491-009AMSD	SampType:	MSD	TestCod	e: TPH	Units: mg/Kg	-dry	Prep Date	e: 11/29/ 2	2004	Run ID: GC	-FID_04112	9A
Client ID: ZZZZZ	Batch ID:	11997	TestN	o: SW8015N	1		Analysis Dat	e: 11/30/	2004	SeqNo: 31	5897	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		231.5	24	237.6	0	97.5	30	150	239.8	3.49	25	*
TDLL (Discol)		249.5	24	237.6	1.24	105	30	150	240.8	3.54	25	*
TPH (Diesel)		249.5	24	231.0	1.24	105	30	130	240.0	0.04	20	

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Page 1 of 17

Work Order: 0411515

as & McDonnell
ANALYTICAL QC SUMMARY REPORT

Project: 32088 Willow Street Station- General Iron BatchID: 12057

Sample ID MB-12057-PNA	SampType: MBLK	TestCode: PNA_SOIL	Units: mg/Kg		Prep Date:	12/2/20	004	Run ID: SV	OC-3_0412	02A
Client ID: ZZZZZ	Batch ID: 12057	TestNo: SW8270C-	-SI		Analysis Date	12/2/20	04	SeqNo: 31	7265	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.025								
Acenaphthylene	ND	0.025								
Anthracene	ND	0.025								
Benz(a)anthracene	ND	0.025								
Benzo(a)pyrene	ND	0.025								
Benzo(b)fluoranthene	ND	0.025								
Benzo(g,h,i)perylene	ND	0.025								
Benzo(k)fluoranthene	ND	0.025								
Chrysene	ND	0.025								
Dibenz(a,h)anthracene	ND	0.025								
Fluoranthene	ND	0.025								
Fluorene	ND	0.025								
Indeno(1,2,3-cd)pyrene	ND	0.025								
Naphthalene	0.002	0.025								J
Phenanthrene	ND	0.025								
Pyrene	ND	0.025								
Sample ID LCS-12057-PNA	SampType: LCS	TestCode: PNA_SOIL	Units: mg/Kg		Prep Date:	12/2/20	04	Run ID: SV	OC-3_0412	02A
Client ID: ZZZZZ	Batch ID: 12057	TestNo: SW8270C-	-SI		Analysis Date	12/2/20	004	SeqNo: 31	7266	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.104	0.025 0.167	0	62.3	30	130	0	0		
Acenaphthylene	0.1063	0.025 0.167	0	63.7	30	130	0	0		
Anthracene	0.1143	0.025 0.167	0	68.5	30	130	0	0		
Benz(a)anthracene	0.1353	0.025 0.167	0	81	30	130	0	0		
Benzo(a)pyrene	0.143	0.025 0.167	0	85.6	30	130	0	0		
Benzo(b)fluoranthene	0.16	0.025 0.167	0	95.8	30	130	0	0		
Benzo(g,h,i)perylene	0.1407	0.025 0.167	0	84.2	30	130	0	0		
Benzo(k)fluoranthene	0.13	0.025 0.167	0	77.8	30	130	0	0		
Chrysene	0.142	0.025 0.167	0	85	30	130	0	0		
Dibenz(a,h)anthracene	0.1517	0.025 0.167	0	90.8	30	130	0	0		

Qualifiers:

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^{* -} Non Accredited Parameter

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R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order:

0411515

Project: 32088 Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12057

Client ID: ZZZZZZ Batch ID: 12057 TestNo: SW8270C-SI Analysis Date: 12/2/I Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit Fluoranthene 0.1313 0.025 0.167 0 78.6 30 130 Fluorene 0.111 0.025 0.167 0 66.5 30 130 Indeno(1,2,3-cd)pyrene 0.147 0.025 0.167 0 88 30 130 Naphthalene 0.093 0.025 0.167 0.002 54.5 30 130 Phenanthrene 0.1063 0.025 0.167 0 63.7 30 130 Pyrene 0.1257 0.025 0.167 0 75.2 30 130	RPD Ref Val 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SeqNo: 317 %RPD 0 0 0 0 0 0	7266 RPDLimit Qual
Fluoranthene 0.1313 0.025 0.167 0 78.6 30 130 Fluorene 0.111 0.025 0.167 0 66.5 30 130 Indeno(1,2,3-cd)pyrene 0.147 0.025 0.167 0 88 30 130 Naphthalene 0.093 0.025 0.167 0.002 54.5 30 130 Phenanthrene 0.1063 0.025 0.167 0 63.7 30 130	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0	RPDLimit Qual
Fluorene 0.111 0.025 0.167 0 66.5 30 130 Indeno(1,2,3-cd)pyrene 0.147 0.025 0.167 0 88 30 130 Naphthalene 0.093 0.025 0.167 0.002 54.5 30 130 Phenanthrene 0.1063 0.025 0.167 0 63.7 30 130	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0	
Indeno(1,2,3-cd)pyrene 0.147 0.025 0.167 0 88 30 130 Naphthalene 0.093 0.025 0.167 0.002 54.5 30 130 Phenanthrene 0.1063 0.025 0.167 0 63.7 30 130	0 0 0 0 0 0 0	0 0 0 0	
Naphthalene 0.093 0.025 0.167 0.002 54.5 30 130 Phenanthrene 0.1063 0.025 0.167 0 63.7 30 130	0 0 0	0 0 0	
Phenanthrene 0.1063 0.025 0.167 0 63.7 30 130	0 0	0	
	0 0	0	
Pyrene 0.1257 0.025 0.167 0 75.2 30 130	-		
	2004	D ID 311	
Sample ID 0412026-003AMS SampType: MS TestCode: PNA_SOIL Units: mg/Kg-dry Prep Date: 12/2/		Run ID: SV	OC-4_041203A
Client ID: ZZZZZ Batch ID: 12057 TestNo: SW8270C-SI Analysis Date: 12/3/	2004	SeqNo: 317	7829
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit	RPD Ref Val	%RPD	RPDLimit Qual
Acenaphthene 0.2812 0.032 0.2109 0.1427 65.7 30 130	0 0	0	
Acenaphthylene 0.2261 0.032 0.2109 0 107 30 130	0 0	0	
Anthracene 0.6857 0.032 0.2109 0.4533 110 30 130	0 0	0	E
Benz(a)anthracene 1.738 0.032 0.2109 0.9863 356 30 130	0 0	0	SE
Benzo(a)pyrene 1.338 0.032 0.2109 0.8688 222 30 130	0 0	0	SE
Benzo(b)fluoranthene 1.441 0.032 0.2109 0.8478 281 30 130	0 0	0	SE
Benzo(g,h,i)perylene 0.4007 0.032 0.2109 0.3861 6.93 30 130	0 0	0	S
Benzo(k)fluoranthene 1.075 0.032 0.2109 0.617 217 30 130	0 0	0	SE
Chrysene 1.826 0.032 0.2109 0.9779 402 30 130	0 0	0	SE
Dibenz(a,h)anthracene 0.2277 0.032 0.2109 0.1763 24.4 30 136	0 0	0	S
Fluoranthene 1.965 0.032 0.2109 1.96 2.38 30 130	0 0	0	SE
Fluorene 0.4167 0.032 0.2109 0.256 76.2 30 130	0 0	0	
Indeno(1,2,3-cd)pyrene 0.4681 0.032 0.2109 0.3735 44.8 30 136	0 0	0	E
Naphthalene 0.2833 0.032 0.2109 0.1763 50.7 30 130	0 0	0	
Phenanthrene 1.445 0.032 0.2109 1.083 172 30 130	0 0	0	SE
Pyrene 1.731 0.032 0.2109 1.528 96.4 30 130	0 0	0	E

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H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order: 0411515

Project: 32088 Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12057

Sample ID 0412026-003AMSD	SampType: MSD	TestCod	de: PNA_SOII	_ Units: mg/	/Kg-dry	Prep Dat	te: 12/2/2 0	004	Run ID: SV	OC-4_04120	3A
Client ID: ZZZZZ	Batch ID: 12057	TestN	lo: SW8270C	-SI		Analysis Da	te: 12/3/2 0	004	SeqNo: 31	7830	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.2839	0.031	0.2085	0.1427	67.7	30	130	0.2812	0.952	50	
Acenaphthylene	0.1977	0.031	0.2085	0	94.8	30	130	0.2261	13.4	50	
Anthracene	0.5053	0.031	0.2085	0.4533	25	30	130	0.6857	30.3	50	SE
Benz(a)anthracene	0.9903	0.031	0.2085	0.9863	1.91	30	130	1.738	54.8	50	SRE
Benzo(a)pyrene	0.6818	0.031	0.2085	0.8688	-89.6	30	130	1.338	65.0	50	SRE
Benzo(b)fluoranthene	0.676	0.031	0.2085	0.8478	-82.4	30	130	1.441	72.3	50	SRE
Benzo(g,h,i)perylene	0.1915	0.031	0.2085	0.3861	-93.3	30	130	0.4007	70.7	50	SR
Benzo(k)fluoranthene	0.6377	0.031	0.2085	0.617	9.95	30	130	1.075	51.1	50	SRE
Chrysene	1.042	0.031	0.2085	0.9779	30.7	30	130	1.826	54.7	50	RE
Dibenz(a,h)anthracene	0.1761	0.031	0.2085	0.1763	-0.0949	30	130	0.2277	25.6	50	S
Fluoranthene	1.156	0.031	0.2085	1.96	-386	30	130	1.965	51.9	50	SRE
Fluorene	0.3938	0.031	0.2085	0.256	66.1	30	130	0.4167	5.67	50	
Indeno(1,2,3-cd)pyrene	0.2273	0.031	0.2085	0.3735	-70.1	30	130	0.4681	69.3	50	SR
Naphthalene	0.2506	0.031	0.2085	0.1763	35.6	30	130	0.2833	12.3	50	
Phenanthrene	0.9774	0.031	0.2085	1.083	-50.6	30	130	1.445	38.6	50	SE
Pyrene	0.9745	0.031	0.2085	1.528	-265	30	130	1.731	55.9	50	SRE

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H/HT - Holding Time Exceeded

Work Order: 0411515

& McDonnell

ANALYTICAL QC SUMMARY REPORT

Project: 32088 Willow Street Station- General Iron BatchID: 12058

Sample ID MB-12058-SVOC	SampType: MBLK	TestCode: SVOC_SOIL Units: mg/Kg	Prep Date: 12/2/2004	Run ID: SVOC-2_041202A
Client ID: ZZZZZ	Batch ID: 12058	TestNo: SW8270C	Analysis Date: 12/2/2004	SeqNo: 317255
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
1,2,4-Trichlorobenzene	ND	0.17		
1,2-Dichlorobenzene	ND	0.17		
1,3-Dichlorobenzene	ND	0.17		
1,4-Dichlorobenzene	ND	0.17		
2, 2'-oxybis(1-Chloropropane)	ND	0.17		
2,4,5-Trichlorophenol	ND	0.33		
2,4,6-Trichlorophenol	ND	0.17		
2,4-Dichlorophenol	ND	0.17		
2,4-Dimethylphenol	ND	0.17		
2,4-Dinitrophenol	ND	0.80		
2,4-Dinitrotoluene	ND	0.17		
2,6-Dinitrotoluene	ND	0.17		
2-Chloronaphthalene	ND	0.17		
2-Chlorophenol	ND	0.17		
2-Methylnaphthalene	ND	0.17		
2-Methylphenol	ND	0.17		
2-Nitroaniline	ND	0.80		
2-Nitrophenol	ND	0.17		
3,3'-Dichlorobenzidine	ND	0.33		
3-Nitroaniline	ND	0.80		
4,6-Dinitro-2-methylphenol	ND	0.80		
4-Bromophenyl phenyl ether	ND	0.17		
4-Chloro-3-methylphenol	ND	0.17		
4-Chloroaniline	ND	0.17		
4-Chlorophenyl phenyl ether	ND	0.17		
4-Methylphenol	ND	0.17		
4-Nitroaniline	ND	0.80		
4-Nitrophenol	ND	0.80		
Acenaphthene	ND	0.17		
Acenaphthylene	ND	0.17		
Aniline	ND	0.17		

Qualifiers:

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Work Order: 0411515

Project:

ANALYTICAL QC SUMMARY REPORT

32088 Willow Street Station- General Iron

BatchID: 12058

Sample ID MB-12058-SVOC	SampType: MBLK	TestCode: SVOC_SOIL Units: mg/Kg	Prep Date: 12/2/2004	Run ID: SVOC-2_041202A
Client ID: ZZZZZ	Batch ID: 12058	TestNo: SW8270C	Analysis Date: 12/2/2004	SeqNo: 317255
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Anthracene	ND	0.17		
Benz(a)anthracene	ND	0.17		
Benzidine	ND	0.17		
Benzo(a)pyrene	ND	0.17		
Benzo(b)fluoranthene	ND	0.17		
Benzo(g,h,i)perylene	ND	0.17		
Benzo(k)fluoranthene	ND	0.17		
Benzoic acid	ND	0.80		
Benzyl alcohol	ND	0.17		
Bis(2-chloroethoxy)methane	ND	0.17		
Bis(2-chloroethyl)ether	ND	0.17		
Bis(2-ethylhexyl)phthalate	ND	0.17		
Butyl benzyl phthalate	ND	0.17		
Carbazole	ND	0.17		
Chrysene	ND	0.17		
Di-n-butyl phthalate	ND	0.17		
Di-n-octyl phthalate	ND	0.17		
Dibenz(a,h)anthracene	ND	0.17		
Dibenzofuran	ND	0.17		
Diethyl phthalate	ND	0.17		
Dimethyl phthalate	ND	0.17		
Fluoranthene	ND	0.17		
Fluorene	ND	0.17		
Hexachlorobenzene	ND	0.17		
Hexachlorobutadiene	ND	0.17		
Hexachlorocyclopentadiene	ND	0.17		
Hexachloroethane	ND	0.17		
Indeno(1,2,3-cd)pyrene	ND	0.17		
Isophorone	ND	0.17		
N-Nitrosodi-n-propylamine	ND	0.17		
N-Nitrosodimethylamine	ND	0.17		

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Page 6 of 17

Work Order: 0411515

Project: 32088 Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12058

Sample ID MB-12058-SVOC	SampType: MBLK	TestCod	de: SVOC_SC	OIL Units: mg/Kg		Prep Date	e: 12/2/2	004	Run ID: SV	OC-2_0412	02A
Client ID: ZZZZZ	Batch ID: 12058	TestN	lo: SW8270C			Analysis Date	e: 12/2/2	004	SeqNo: 31	7255	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
N-Nitrosodiphenylamine	ND	0.17									
Naphthalene	ND	0.17									
Nitrobenzene	ND	0.17									
Pentachlorophenol	ND	0.80									
Phenanthrene	ND	0.17									
Phenol	ND	0.17									
Pyrene	ND	0.17									
Pyridine	ND	0.17									
Sample ID LCS-12058-SVOC	SampType: LCS	TestCod	de: SVOC_SC	OIL Units: mg/Kg		Prep Date	e: 12/2/2	004	Run ID: SV	OC-2_0412	03A
Client ID: ZZZZZ	Batch ID: 12058	TestN	lo: SW8270C			Analysis Date	e: 12/3/2 0	004	SeqNo: 31	7582	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	1.245	0.17	1.667	0	74.7	55	106	0	0		
1,4-Dichlorobenzene	1.11	0.17	1.667	0	66.6	55	90	0	0		
2,4-Dinitrotoluene	1.562	0.17	1.667	0	93.7	55	101	0	0		
2-Chlorophenol	2.44	0.17	3.333	0	73.2	61	91	0	0		
4-Chloro-3-methylphenol	3.251	0.17	3.333	0	97.5	62	100	0	0		
4-Nitrophenol	3.626	0.80	3.333	0	109	53	123	0	0		
Acenaphthene	1.403	0.17	1.667	0	84.1	65	101	0	0		
N-Nitrosodi-n-propylamine	1.798	0.17	1.667	0	108	55	100	0	0		S
Pentachlorophenol	3.583	0.80	3.333	0	108	40	120	0	0		
Phenol	2.836	0.17	3.333	0	85.1	60	91	0	0		
Pyrene	1.989	0.17	1.667	0	119	50	131	0	0		
Sample ID 0411515-003BMS	SampType: MS	TestCod	de: SVOC_SC	OIL- Units: mg/Kg	-dry	Prep Date	e: 12/2/2	004	Run ID: SV	OC-2_0412	02A
Client ID: WSS-SB50-003	Batch ID: 12058	TestN	lo: SW8270C			Analysis Date	e: 12/3/2	004	SeqNo: 31	7568	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloro-3-methylphenol	4.331	0.45	4.502	0	96.2	62	100	0	0		
2-Chlorophenol	3.2	0.45	4.502	0	71.1	61	91	0	0		

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Work Order:

N-Nitrosodi-n-propylamine

1,2,4-Trichlorobenzene

Pentachlorophenol

Phenol

Project:

0411515

32088 Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12058

Sample ID 0411515-003BMS	SampType: MS	TestCo	de: SVOC_S	OIL- Units: mg/	Kg-dry	Prep Dat	te: 12/2/2	004	Run ID: SV	OC-2_04120)2A
Client ID: WSS-SB50-003	Batch ID: 12058	Test	No: SW82700	;		Analysis Da	te: 12/3/2	004	SeqNo: 31	7568	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	1.557	0.45	2.251	0	69.1	55	90	0	0		
2,4-Dinitrotoluene	0.9765	0.23	2.251	0	43.4	55	101	0	0		S
4-Nitrophenol	2.915	2.2	4.502	0	64.8	53	123	0	0		
N-Nitrosodi-n-propylamine	2.359	0.23	2.251	0	105	55	100	0	0		S
Pentachlorophenol	2.286	2.2	4.502	0	50.8	40	120	0	0		
Phenol	3.659	0.45	4.502	0	81.3	60	91	0	0		
1,2,4-Trichlorobenzene	1.895	0.45	2.251	0	84.2	55	106	0	0		
Sample ID 0411515-003BMSD	SampType: MSD	TestCo	de: SVOC_S	OIL- Units: mg/	Kg-dry	Prep Dat	te: 12/2/2	004	Run ID: SV	OC-2_04120)2A
Client ID: WSS-SB50-003	Batch ID: 12058	Test	No: SW82700	;		Analysis Da	te: 12/3/2 0	004	SeqNo: 31	7569	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qua
4-Chloro-3-methylphenol	4.559	0.45	4.5	0	101	62	100	4.331	5.11	33	S
2-Chlorophenol	3.524	0.45	4.5	0	78.3	61	91	3.2	9.63	50	
1,4-Dichlorobenzene	1.717	0.45	2.251	0	76.3	55	90	1.557	9.78	27	
2,4-Dinitrotoluene	1.013	0.23	2.251	0	45	55	101	0.9765	3.68	47	S
4-Nitrophenol	3.15	2.2	4.5	0	70	53	123	2.915	7.75	50	

0

0

0

113

64.8

91.2

92.6

55

40

60

55

100

120

91

106

2.359

2.286

3.659

1.895

2.542

2.916

4.106

2.084

0.23

2.2

0.45

0.45

2.251

2.251

4.5

4.5

7.44

24.2

11.5

9.49

38

47

35

23

S

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H/HT - Holding Time Exceeded

Work Order: 0411515

Project: 32088 Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15505

Sample ID VBLK120404-2	SampType: MBLK	TestCode: VOC_E	NCOR Units: mg/Kg		Prep Date	e:		Run ID: VC	A-2_04120	1A
Client ID: ZZZZZ	Batch ID: R15505	TestNo: SW503	5/8260		Analysis Dat	e: 12/4/2	004	SeqNo: 31	7835	
Analyte	Result	PQL SPK valu	e SPK Ref Val	%REC	Lowl imit	Highl imit	RPD Ref Val	%RPD	RPDLimit	Qual
· .			e Sirkikeivai	/olvec	LOWEIIIII	- ingriEiriik	THE THE VAI	70111 15	IN DEIMI	Quai
1,1,1-Trichloroethane	ND	0.0050								
1,1,2,2-Tetrachloroethane	ND	0.0050								
1,1,2-Trichloroethane	ND	0.0050								
1,1-Dichloroethane	ND	0.0050								
1,1-Dichloroethene	ND	0.0050								
1,2-Dichloroethane	ND	0.0050								
1,2-Dichloropropane	ND	0.0050								
2-Butanone	ND	0.010								
2-Hexanone	ND	0.010								
4-Methyl-2-pentanone	ND	0.010								
Acetone	ND	0.025								
Benzene	ND	0.0050								
Bromodichloromethane	ND	0.0050								
Bromoform	ND	0.0050								
Bromomethane	ND	0.010								
Carbon disulfide	ND	0.0050								
Carbon tetrachloride	ND	0.0050								
Chlorobenzene	ND	0.0050								
Chloroethane	ND	0.010								
Chloroform	ND	0.0050								
Chloromethane	ND	0.010								
cis-1,2-Dichloroethene	ND	0.0050								
cis-1,3-Dichloropropene	ND	0.0050								
Dibromochloromethane	ND	0.0050								
Ethylbenzene	ND	0.0050								
Methyl tert-butyl ether	ND	0.0050								
Methylene chloride	0.00263	0.010								J
Styrene	ND	0.0050								
Tetrachloroethene	ND	0.0050								
Toluene	ND	0.0050								
trans-1,2-Dichloroethene	ND	0.0050								

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Work Order: 0411515

Project: 32088 Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15505

Sample ID VBLK120404-2	SampType: MBLK	TestCode: VOC_ENCOR Units: mg/Kg				Prep Da			Run ID: VOA-2_041204A		
Client ID: ZZZZZ	Batch ID: R15505	TestN	lo: SW5035/8	260		Analysis Da	te: 12/4/2	004	SeqNo: 31	7835	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	0.0050									
Trichloroethene	ND	0.0050									
Vinyl chloride	ND	0.0050									
Xylenes, Total	ND	0.010									

Sample ID VLCS120404-2	SampType: LCS	TestCo	de: VOC_ENC	COR Units: mg/Kg		Prep Da	te:		Run ID: VC)A-2_04120	4A
Client ID: ZZZZZ	Batch ID: R15505	Test	No: SW5035/ 8	3260		Analysis Da	ate: 12/4/2 0	004	SeqNo: 31	7836	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.05001	0.0050	0.05	0	100	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.04472	0.0050	0.05	0	89.4	70	130	0	0		
1,1,2-Trichloroethane	0.04713	0.0050	0.05	0	94.3	70	130	0	0		
1,1-Dichloroethane	0.04661	0.0050	0.05	0	93.2	70	130	0	0		
1,1-Dichloroethene	0.04801	0.0050	0.05	0	96	70	130	0	0		
1,2-Dichloroethane	0.0467	0.0050	0.05	0	93.4	70	130	0	0		
1,2-Dichloropropane	0.04582	0.0050	0.05	0	91.6	70	130	0	0		
2-Butanone	0.04905	0.010	0.05	0	98.1	70	130	0	0		
2-Hexanone	0.04717	0.010	0.05	0	94.3	70	130	0	0		
4-Methyl-2-pentanone	0.04825	0.010	0.05	0	96.5	70	130	0	0		
Acetone	0.05607	0.025	0.05	0	112	50	150	0	0		
Benzene	0.04851	0.0050	0.05	0	97	70	130	0	0		
Bromodichloromethane	0.04391	0.0050	0.05	0	87.8	70	130	0	0		
Bromoform	0.04642	0.0050	0.05	0	92.8	70	130	0	0		
Bromomethane	0.03593	0.010	0.05	0	71.9	70	130	0	0		
Carbon disulfide	0.06304	0.0050	0.05	0	126	70	130	0	0		
Carbon tetrachloride	0.04955	0.0050	0.05	0	99.1	70	130	0	0		
Chlorobenzene	0.04974	0.0050	0.05	0	99.5	70	130	0	0		
Chloroethane	0.04898	0.010	0.05	0	98	70	130	0	0		
Chloroform	0.04742	0.0050	0.05	0	94.8	70	130	0	0		
Chloromethane	0.03727	0.010	0.05	0	74.5	70	130	0	0		
cis-1,2-Dichloroethene	0.04695	0.0050	0.05	0	93.9	70	130	0	0		

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Page 10 of 17

Work Order: 0411515

Project: 32088 Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15505

Sample ID VLCS120404-2	SampType: LCS	TestCo	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	e:		Run ID: VC	OA-2_041204	A
Client ID: ZZZZZ	Batch ID: R15505	TestN	lo: SW5035/82	260		Analysis Da	te: 12/4/2 0	004	SeqNo: 31	7836	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	0.04625	0.0050	0.05	0	92.5	70	130	0	0		
Dibromochloromethane	0.04791	0.0050	0.05	0	95.8	70	130	0	0		
Ethylbenzene	0.05	0.0050	0.05	0	100	70	130	0	0		
Methyl tert-butyl ether	0.04703	0.0050	0.05	0	94.1	50	150	0	0		
Methylene chloride	0.04639	0.010	0.05	0.00263	87.5	70	130	0	0		
Styrene	0.04879	0.0050	0.05	0	97.6	70	130	0	0		
Tetrachloroethene	0.05447	0.0050	0.05	0	109	70	130	0	0		
Toluene	0.04844	0.0050	0.05	0	96.9	70	130	0	0		
trans-1,2-Dichloroethene	0.04861	0.0050	0.05	0	97.2	70	130	0	0		
trans-1,3-Dichloropropene	0.05387	0.0050	0.05	0	108	70	130	0	0		
Trichloroethene	0.04919	0.0050	0.05	0	98.4	70	130	0	0		
Vinyl chloride	0.04859	0.0050	0.05	0	97.2	70	130	0	0		
Xylenes, Total	0.1588	0.010	0.15	0	106	70	130	0	0		
Sample ID VLCSD120404-2	SampType: LCSD	TestCo	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	e:		Run ID: VC	OA-2_041204	A
Client ID: ZZZZZ	Batch ID: R15505	TestN	lo: SW5035/8 2	260		Analysis Da	te: 12/4/2 0	004	SeqNo: 31	7837	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	Result 0.04873	PQL 0.0050	SPK value 0.05	SPK Ref Val	%REC 97.5	LowLimit 70	HighLimit	0.05001	%RPD 2.59	RPDLimit 20	Qual
											Qual
1,1,1-Trichloroethane	0.04873	0.0050	0.05	0	97.5	70	130	0.05001	2.59	20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	0.04873 0.04452	0.0050 0.0050	0.05 0.05	0 0	97.5 89	70 70	130 130	0.05001 0.04472	2.59 0.448	20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane	0.04873 0.04452 0.04694	0.0050 0.0050 0.0050	0.05 0.05 0.05	0 0 0	97.5 89 93.9	70 70 70	130 130 130	0.05001 0.04472 0.04713	2.59 0.448 0.404	20 20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane	0.04873 0.04452 0.04694 0.04771	0.0050 0.0050 0.0050 0.0050	0.05 0.05 0.05 0.05	0 0 0 0	97.5 89 93.9 95.4	70 70 70 70	130 130 130 130	0.05001 0.04472 0.04713 0.04661	2.59 0.448 0.404 2.33	20 20 20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane	0.04873 0.04452 0.04694 0.04771 0.04765	0.0050 0.0050 0.0050 0.0050 0.0050	0.05 0.05 0.05 0.05 0.05	0 0 0 0 0	97.5 89 93.9 95.4 95.3	70 70 70 70 70	130 130 130 130 130	0.05001 0.04472 0.04713 0.04661 0.04801	2.59 0.448 0.404 2.33 0.753	20 20 20 20 20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2-Dichloroethane	0.04873 0.04452 0.04694 0.04771 0.04765 0.04895	0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	0.05 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0	97.5 89 93.9 95.4 95.3 97.9	70 70 70 70 70 70	130 130 130 130 130 130	0.05001 0.04472 0.04713 0.04661 0.04801 0.0467	2.59 0.448 0.404 2.33 0.753 4.70	20 20 20 20 20 20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane	0.04873 0.04452 0.04694 0.04771 0.04765 0.04895 0.04841	0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	0.05 0.05 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0 0	97.5 89 93.9 95.4 95.3 97.9 96.8	70 70 70 70 70 70 70	130 130 130 130 130 130 130	0.05001 0.04472 0.04713 0.04661 0.04801 0.0467 0.04582	2.59 0.448 0.404 2.33 0.753 4.70 5.50	20 20 20 20 20 20 20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone	0.04873 0.04452 0.04694 0.04771 0.04765 0.04895 0.04841 0.04638	0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.010	0.05 0.05 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0 0	97.5 89 93.9 95.4 95.3 97.9 96.8 92.8	70 70 70 70 70 70 70 70	130 130 130 130 130 130 130	0.05001 0.04472 0.04713 0.04661 0.04801 0.0467 0.04582 0.04905	2.59 0.448 0.404 2.33 0.753 4.70 5.50 5.60	20 20 20 20 20 20 20 20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone 2-Hexanone	0.04873 0.04452 0.04694 0.04771 0.04765 0.04895 0.04841 0.04638 0.04873	0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.010	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0 0 0	97.5 89 93.9 95.4 95.3 97.9 96.8 92.8 97.5	70 70 70 70 70 70 70 70 70	130 130 130 130 130 130 130 130	0.05001 0.04472 0.04713 0.04661 0.04801 0.0467 0.04582 0.04905 0.04717	2.59 0.448 0.404 2.33 0.753 4.70 5.50 5.60 3.25	20 20 20 20 20 20 20 20 20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone 2-Hexanone 4-Methyl-2-pentanone	0.04873 0.04452 0.04694 0.04771 0.04765 0.04895 0.04841 0.04638 0.04873	0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.010 0.010	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0 0 0	97.5 89 93.9 95.4 95.3 97.9 96.8 92.8 97.5	70 70 70 70 70 70 70 70 70	130 130 130 130 130 130 130 130 130	0.05001 0.04472 0.04713 0.04661 0.04801 0.04582 0.04905 0.04717 0.04825	2.59 0.448 0.404 2.33 0.753 4.70 5.50 5.60 3.25 6.57	20 20 20 20 20 20 20 20 20 20 20	Qual

Qualifiers:

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H/HT - Holding Time Exceeded

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Work Order:

Project:

0411515

32088 Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15505

Sample ID VLCSD120404-2	SampType: LCSD		de: VOC_ENC	0 0		Prep Date				A-2_041204	Α
Client ID: ZZZZZ	Batch ID: R15505	TestN	lo: SW5035/8	260		Analysis Date	e: 12/4/2 0	004	SeqNo: 317	7837	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.04739	0.0050	0.05	0	94.8	70	130	0.04642	2.07	20	
Bromomethane	0.03774	0.010	0.05	0	75.5	70	130	0.03593	4.91	20	
Carbon disulfide	0.06289	0.0050	0.05	0	126	70	130	0.06304	0.238	20	
Carbon tetrachloride	0.0488	0.0050	0.05	0	97.6	70	130	0.04955	1.53	20	
Chlorobenzene	0.0494	0.0050	0.05	0	98.8	70	130	0.04974	0.686	20	
Chloroethane	0.04921	0.010	0.05	0	98.4	70	130	0.04898	0.468	20	
Chloroform	0.04836	0.0050	0.05	0	96.7	70	130	0.04742	1.96	20	
Chloromethane	0.03875	0.010	0.05	0	77.5	70	130	0.03727	3.89	20	
cis-1,2-Dichloroethene	0.04887	0.0050	0.05	0	97.7	70	130	0.04695	4.01	20	
cis-1,3-Dichloropropene	0.04814	0.0050	0.05	0	96.3	70	130	0.04625	4.00	20	
Dibromochloromethane	0.04889	0.0050	0.05	0	97.8	70	130	0.04791	2.02	20	
Ethylbenzene	0.04987	0.0050	0.05	0	99.7	70	130	0.05	0.260	20	
Methyl tert-butyl ether	0.05001	0.0050	0.05	0	100	50	150	0.04703	6.14	20	
Methylene chloride	0.04692	0.010	0.05	0.00263	88.6	70	130	0.04639	1.14	20	
Styrene	0.04789	0.0050	0.05	0	95.8	70	130	0.04879	1.86	20	
Tetrachloroethene	0.05277	0.0050	0.05	0	106	70	130	0.05447	3.17	20	
Toluene	0.04944	0.0050	0.05	0	98.9	70	130	0.04844	2.04	20	
trans-1,2-Dichloroethene	0.0501	0.0050	0.05	0	100	70	130	0.04861	3.02	20	
trans-1,3-Dichloropropene	0.05307	0.0050	0.05	0	106	70	130	0.05387	1.50	20	
Trichloroethene	0.04933	0.0050	0.05	0	98.7	70	130	0.04919	0.284	20	
Vinyl chloride	0.0497	0.0050	0.05	0	99.4	70	130	0.04859	2.26	20	
Xylenes, Total	0.1546	0.010	0.15	0	103	70	130	0.1588	2.70	20	

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Work Order: 0411515

Project:

ANALYTICAL QC SUMMARY REPORT

32088 Willow Street Station- General Iron

BatchID: R15510

Sample ID VBLK120504-2	SampType: MBLK	TestCod	de: VOC_ENC	OR Units: mg/Kg	I	Prep Da	te:		Run ID: V	OA-2_04120	5A
Client ID: ZZZZZ	Batch ID: R15510	TestN	lo: SW5035/ 8	3260		Analysis Da	ate: 12/5/2	004	SeqNo: 31	7893	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.0050									
1,1,2,2-Tetrachloroethane	ND	0.0050									
1,1,2-Trichloroethane	ND	0.0050									
1,1-Dichloroethane	ND	0.0050									
1,1-Dichloroethene	ND	0.0050									
1,2-Dichloroethane	ND	0.0050									
1,2-Dichloropropane	ND	0.0050									
2-Butanone	ND	0.010									
2-Hexanone	ND	0.010									
4-Methyl-2-pentanone	ND	0.010									
Acetone	ND	0.025									
Benzene	ND	0.0050									
Bromodichloromethane	ND	0.0050									
Bromoform	ND	0.0050									
Bromomethane	ND	0.010									
Carbon disulfide	ND	0.0050									
Carbon tetrachloride	ND	0.0050									
Chlorobenzene	ND	0.0050									
Chloroethane	ND	0.010									
Chloroform	ND	0.0050									
Chloromethane	ND	0.010									
cis-1,2-Dichloroethene	ND	0.0050									
cis-1,3-Dichloropropene	ND	0.0050									
Dibromochloromethane	ND	0.0050									
Ethylbenzene	ND	0.0050									
Methyl tert-butyl ether	ND	0.0050									
Methylene chloride	0.00139	0.010									J
Styrene	ND	0.0050									
Tetrachloroethene	ND	0.0050									
Toluene	ND	0.0050									
trans-1,2-Dichloroethene	ND	0.0050									

Qualifiers:

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H/HT - Holding Time Exceeded

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Page 13 of 17

Work Order: 0411515

Project:

32088 Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15510

Sample ID VBLK120504-2	SampType: MBLK	TestCod	de: VOC_ENC	OR Units: mg/Kg		Prep Da	te:		Run ID: VC	A-2_04120	5A
Client ID: ZZZZZ	Batch ID: R15510	TestN	lo: SW5035/8	3260		Analysis Da	te: 12/5/2	004	SeqNo: 31	7893	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	0.0050									
Trichloroethene	ND	0.0050									
Vinyl chloride	ND	0.0050									
Xylenes, Total	ND	0.010									

Sample ID VLCS120504-2	VLCS120504-2 SampType: LCS TestCo			stCode: VOC_ENCOR Units: mg/Kg			Prep Date:				Run ID: VOA-2_041205A			
Client ID: ZZZZZ	Batch ID: R15510	TestNo: SW5035/8260			Analysis Date: 12/5/2004				SeqNo: 317894					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual			
1,1,1-Trichloroethane	0.05018	0.0050	0.05	0	100	70	130	0	0					
1,1,2,2-Tetrachloroethane	0.04199	0.0050	0.05	0	84	70	130	0	0					
1,1,2-Trichloroethane	0.0474	0.0050	0.05	0	94.8	70	130	0	0					
1,1-Dichloroethane	0.04887	0.0050	0.05	0	97.7	70	130	0	0					
1,1-Dichloroethene	0.04892	0.0050	0.05	0	97.8	70	130	0	0					
1,2-Dichloroethane	0.04739	0.0050	0.05	0	94.8	70	130	0	0					
1,2-Dichloropropane	0.04603	0.0050	0.05	0	92.1	70	130	0	0					
2-Butanone	0.04513	0.010	0.05	0	90.3	70	130	0	0					
2-Hexanone	0.04515	0.010	0.05	0	90.3	70	130	0	0					
4-Methyl-2-pentanone	0.04566	0.010	0.05	0	91.3	70	130	0	0					
Acetone	0.06161	0.025	0.05	0	123	50	150	0	0					
Benzene	0.04711	0.0050	0.05	0	94.2	70	130	0	0					
Bromodichloromethane	0.04305	0.0050	0.05	0	86.1	70	130	0	0					
Bromoform	0.04622	0.0050	0.05	0	92.4	70	130	0	0					
Bromomethane	0.03514	0.010	0.05	0	70.3	70	130	0	0					
Carbon disulfide	0.06137	0.0050	0.05	0	123	70	130	0	0					
Carbon tetrachloride	0.04859	0.0050	0.05	0	97.2	70	130	0	0					
Chlorobenzene	0.04881	0.0050	0.05	0	97.6	70	130	0	0					
Chloroethane	0.04886	0.010	0.05	0	97.7	70	130	0	0					
Chloroform	0.04879	0.0050	0.05	0	97.6	70	130	0	0					
Chloromethane	0.038	0.010	0.05	0	76	70	130	0	0					
cis-1,2-Dichloroethene	0.05012	0.0050	0.05	0	100	70	130	0	0					

Qualifiers:

ND - Not Detected at the Reporting Limit

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R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Page 14 of 17

Work Order: 0411515

32088 Willow Street Station-General Iron **Project:**

ANALYTICAL QC SUMMARY REPORT

BatchID: R15510

Sample ID VLCS120504-2	SampType: LCS	TestCo	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	te:		Run ID: VC	A-2_041205	A
Client ID: ZZZZZ	Batch ID: R15510	TestN	lo: SW5035/8	260		Analysis Da	te: 12/5/2 0	004	SeqNo: 31	7894	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	0.04727	0.0050	0.05	0	94.5	70	130	0	0		
Dibromochloromethane	0.0487	0.0050	0.05	0	97.4	70	130	0	0		
Ethylbenzene	0.04847	0.0050	0.05	0	96.9	70	130	0	0		
Methyl tert-butyl ether	0.04872	0.0050	0.05	0	97.4	50	150	0	0		
Methylene chloride	0.04823	0.010	0.05	0.00139	93.7	70	130	0	0		
Styrene	0.04622	0.0050	0.05	0	92.4	70	130	0	0		
Tetrachloroethene	0.0526	0.0050	0.05	0	105	70	130	0	0		
Toluene	0.04763	0.0050	0.05	0	95.3	70	130	0	0		
trans-1,2-Dichloroethene	0.05072	0.0050	0.05	0	101	70	130	0	0		
trans-1,3-Dichloropropene	0.05165	0.0050	0.05	0	103	70	130	0	0		
Trichloroethene	0.05031	0.0050	0.05	0	101	70	130	0	0		
Vinyl chloride	0.05024	0.0050	0.05	0	100	70	130	0	0		
Xylenes, Total	0.1518	0.010	0.15	0	101	70	130	0	0		
Sample ID VLCSD120504-2	SampType: LCSD	TestCo	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	te:		Run ID: VC	A-2_041205	A
Client ID: ZZZZZ	Batch ID: R15510	TestN	lo: SW5035/8	260		Analysis Da	te: 12/5/2	004	SeqNo: 31	7895	
Analyte											
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	Result 0.05132	PQL 0.0050	SPK value 0.05	SPK Ref Val	%REC 103	LowLimit 70	HighLimit	RPD Ref Val 0.05018	%RPD 2.25	RPDLimit 20	Qual
											Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	0.05132	0.0050	0.05	0	103	70	130	0.05018	2.25	20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	0.05132 0.04491	0.0050 0.0050	0.05 0.05	0	103 89.8	70 70	130 130	0.05018 0.04199	2.25 6.72	20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane	0.05132 0.04491 0.04998	0.0050 0.0050 0.0050	0.05 0.05 0.05	0 0 0	103 89.8 100	70 70 70	130 130 130	0.05018 0.04199 0.0474	2.25 6.72 5.30	20 20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane	0.05132 0.04491 0.04998 0.04775	0.0050 0.0050 0.0050 0.0050	0.05 0.05 0.05 0.05	0 0 0 0	103 89.8 100 95.5	70 70 70 70	130 130 130 130	0.05018 0.04199 0.0474 0.04887	2.25 6.72 5.30 2.32	20 20 20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2-Dichloroethane	0.05132 0.04491 0.04998 0.04775 0.0489	0.0050 0.0050 0.0050 0.0050 0.0050	0.05 0.05 0.05 0.05 0.05	0 0 0 0	103 89.8 100 95.5 97.8	70 70 70 70 70	130 130 130 130 130	0.05018 0.04199 0.0474 0.04887 0.04892	2.25 6.72 5.30 2.32 0.0409	20 20 20 20 20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2-Dichloroethane 1,2-Dichloropropane	0.05132 0.04491 0.04998 0.04775 0.0489 0.0493	0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	0.05 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0	103 89.8 100 95.5 97.8 98.6	70 70 70 70 70 70	130 130 130 130 130 130	0.05018 0.04199 0.0474 0.04887 0.04892 0.04739	2.25 6.72 5.30 2.32 0.0409 3.95	20 20 20 20 20 20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane	0.05132 0.04491 0.04998 0.04775 0.0489 0.0493 0.04699	0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	0.05 0.05 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0 0	103 89.8 100 95.5 97.8 98.6 94	70 70 70 70 70 70 70	130 130 130 130 130 130 130	0.05018 0.04199 0.0474 0.04887 0.04892 0.04739 0.04603	2.25 6.72 5.30 2.32 0.0409 3.95 2.06	20 20 20 20 20 20 20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropethane 2-Butanone 2-Hexanone	0.05132 0.04491 0.04998 0.04775 0.0489 0.0493 0.04699 0.05156	0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.010	0.05 0.05 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0 0	103 89.8 100 95.5 97.8 98.6 94 103	70 70 70 70 70 70 70 70	130 130 130 130 130 130 130	0.05018 0.04199 0.0474 0.04887 0.04892 0.04739 0.04603 0.04513	2.25 6.72 5.30 2.32 0.0409 3.95 2.06 13.3	20 20 20 20 20 20 20 20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone	0.05132 0.04491 0.04998 0.04775 0.0489 0.0493 0.04699 0.05156 0.04682	0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.010	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0 0 0	103 89.8 100 95.5 97.8 98.6 94 103 93.6	70 70 70 70 70 70 70 70 70	130 130 130 130 130 130 130 130	0.05018 0.04199 0.0474 0.04887 0.04892 0.04739 0.04603 0.04513	2.25 6.72 5.30 2.32 0.0409 3.95 2.06 13.3 3.63	20 20 20 20 20 20 20 20 20 20	Qual
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone 2-Hexanone 4-Methyl-2-pentanone	0.05132 0.04491 0.04998 0.04775 0.0489 0.0493 0.04699 0.05156 0.04682 0.04937	0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.010 0.010	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05	0 0 0 0 0 0 0	103 89.8 100 95.5 97.8 98.6 94 103 93.6 98.7	70 70 70 70 70 70 70 70 70	130 130 130 130 130 130 130 130 130	0.05018 0.04199 0.0474 0.04887 0.04892 0.04739 0.04603 0.04513 0.04515	2.25 6.72 5.30 2.32 0.0409 3.95 2.06 13.3 3.63 7.81	20 20 20 20 20 20 20 20 20 20 20	Qual

Qualifiers:

H/HT - Holding Time Exceeded

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blanl

Work Order:

0411515

Project: 32088 Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15510

Sample ID VLCSD120504-2	SampType: LCSD	TestCo	de: VOC_ENC	OR Units: mg/Kg		Prep Date	:		Run ID: VO	A-2_041205	Α
Client ID: ZZZZZ	Batch ID: R15510	TestN	lo: SW5035/8	260		Analysis Date	e: 12/5/2 0	004	SeqNo: 317	7895	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.05092	0.0050	0.05	0	102	70	130	0.04622	9.68	20	
Bromomethane	0.03729	0.010	0.05	0	74.6	70	130	0.03514	5.94	20	
Carbon disulfide	0.0633	0.0050	0.05	0	127	70	130	0.06137	3.10	20	
Carbon tetrachloride	0.05182	0.0050	0.05	0	104	70	130	0.04859	6.43	20	
Chlorobenzene	0.05096	0.0050	0.05	0	102	70	130	0.04881	4.31	20	
Chloroethane	0.04933	0.010	0.05	0	98.7	70	130	0.04886	0.957	20	
Chloroform	0.0495	0.0050	0.05	0	99	70	130	0.04879	1.44	20	
Chloromethane	0.0384	0.010	0.05	0	76.8	70	130	0.038	1.05	20	
cis-1,2-Dichloroethene	0.05085	0.0050	0.05	0	102	70	130	0.05012	1.45	20	
cis-1,3-Dichloropropene	0.04869	0.0050	0.05	0	97.4	70	130	0.04727	2.96	20	
Dibromochloromethane	0.05112	0.0050	0.05	0	102	70	130	0.0487	4.85	20	
Ethylbenzene	0.0511	0.0050	0.05	0	102	70	130	0.04847	5.28	20	
Methyl tert-butyl ether	0.05089	0.0050	0.05	0	102	50	150	0.04872	4.36	20	
Methylene chloride	0.04817	0.010	0.05	0.00139	93.6	70	130	0.04823	0.124	20	
Styrene	0.04986	0.0050	0.05	0	99.7	70	130	0.04622	7.58	20	
Tetrachloroethene	0.05527	0.0050	0.05	0	111	70	130	0.0526	4.95	20	
Toluene	0.04941	0.0050	0.05	0	98.8	70	130	0.04763	3.67	20	
trans-1,2-Dichloroethene	0.05097	0.0050	0.05	0	102	70	130	0.05072	0.492	20	
trans-1,3-Dichloropropene	0.05494	0.0050	0.05	0	110	70	130	0.05165	6.17	20	
Trichloroethene	0.05253	0.0050	0.05	0	105	70	130	0.05031	4.32	20	
Vinyl chloride	0.05152	0.0050	0.05	0	103	70	130	0.05024	2.52	20	
Xylenes, Total	0.1588	0.010	0.15	0	106	70	130	0.1518	4.50	20	

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

Work Order: 0411515

Project:

0411515 32088 Willow Street Station- General Iron ANALYTICAL QC SUMMARY REPORT

BatchID: R15427

Sample ID MBLK	SampType: MBLK	TestCode: PMOIST	Units: wt%	Prep Date: 11/30/2004	Run ID: BALANCE_041130A
Client ID: ZZZZZ	Batch ID: R15427	TestNo: D2974		Analysis Date: 12/1/2004	SeqNo: 316168
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Percent Moisture	ND	0.01000			*
Sample ID LCS-S	SampType: LCS	TestCode: PMOIST	Units: wt%	Prep Date: 11/30/2004	Run ID: BALANCE_041130A
Client ID: ZZZZZ	Batch ID: R15427	TestNo: D2974		Analysis Date: 12/1/2004	SeqNo: 316169
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Percent Moisture	4.89	0.01000 5	0	97.8 80 120 0	0 *
Sample ID LCS-W	SampType: LCS	TestCode: PMOIST	Units: wt%	Prep Date: 11/30/2004	Run ID: BALANCE_041130A
Client ID: ZZZZZ	Batch ID: R15427	TestNo: D2974		Analysis Date: 12/1/2004	SeqNo: 316170
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Percent Moisture	99.8	0.01000 99.8	0	100 80 120 0	0 *

2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

December 15, 2004

Burns & McDonnell 2601 W. 22nd Street

OakBrook, IL 60523-1229 Telephone: (312) 563-0371 Fax: (630) 990-0301

RE: 32088, Willow Street Station- General Iron STAT Project No: 0412018

Dear Diane Saftic:

STAT Analysis received 9 samples for the referenced project on 12/1/2004. The analytical results are presented in the following report.

This report is revised to reflect changes made after the initial report was issued.

All analyses were performed in accordance with the requirements of 35 IAC part 186 (Accreditation #100445). Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 563-0371.

Sincerely,

Craig Chawla

Project Manager

The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory.

Date: December 15, 2004

Client: Burns & McDonnell

Project: 32088, Willow Street Station-General Iron Work Order Sample Summary

Lab Order: 0412018

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
0412018-001A	WSS-SB57-001	10-12'	11/30/2004 8:25:00 AM	12/1/2004
0412018-001B	WSS-SB57-001	10-12'	11/30/2004 8:25:00 AM	12/1/2004
0412018-002A	WSS-SB57-002	16-18'	11/30/2004 8:35:00 AM	12/1/2004
0412018-002B	WSS-SB57-002	16-18'	11/30/2004 8:35:00 AM	12/1/2004
0412018-003A	WSS-SB46-001	10-12'	11/30/2004 12:00:00 PM	12/1/2004
0412018-003B	WSS-SB46-001	10-12'	11/30/2004 12:00:00 PM	12/1/2004
0412018-004A	WSS-SB46-002	16-18'	11/30/2004 12:10:00 PM	12/1/2004
0412018-004B	WSS-SB46-002	16-18'	11/30/2004 12:10:00 PM	12/1/2004
0412018-005A	WSS-SB48-001	8-10'	11/30/2004 2:35:00 PM	12/1/2004
0412018-005B	WSS-SB48-001	8-10'	11/30/2004 2:35:00 PM	12/1/2004
0412018-006A	WSS-SB48-002	18-20'	11/30/2004 2:45:00 PM	12/1/2004
0412018-006B	WSS-SB48-002	18-20'	11/30/2004 2:45:00 PM	12/1/2004
0412018-007A	WSS-SB49-001		11/30/2004 4:00:00 PM	12/1/2004
0412018-007B	WSS-SB49-001		11/30/2004 4:00:00 PM	12/1/2004
0412018-008A	WSS-SB49-002		11/30/2004 4:15:00 PM	12/1/2004
0412018-009A	WSS-TB02			12/1/2004

Page 1 of 1

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client: Client Sample ID:** WSS-SB57-001

Lab Order: 0412018 Tag Number: 10-12'

Project: 32088, Willow Street Station-General Iron **Collection Date:** 11/30/2004 8:25:00 AM

Lab ID: 0412018-001A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50	035/8260E	B Prep	Date: 12/2/2004	1 Analyst: PS
Acetone	ND	0.047	mg/Kg-dry	1	12/5/2004
Benzene	ND	0.0093	mg/Kg-dry	1	12/5/2004
Bromodichloromethane	ND	0.0093	mg/Kg-dry	1	12/5/2004
Bromoform	ND	0.0093	mg/Kg-dry	1	12/5/2004
Bromomethane	ND	0.019	mg/Kg-dry	1	12/5/2004
2-Butanone	ND	0.019	mg/Kg-dry	1	12/5/2004
Carbon disulfide	ND	0.0093	mg/Kg-dry	1	12/5/2004
Carbon tetrachloride	ND	0.0093	mg/Kg-dry	1	12/5/2004
Chlorobenzene	ND	0.0093	mg/Kg-dry	1	12/5/2004
Chloroethane	ND	0.019	mg/Kg-dry	1	12/5/2004
Chloroform	ND	0.0093	mg/Kg-dry	1	12/5/2004
Chloromethane	ND	0.0093	mg/Kg-dry	1	12/5/2004
Dibromochloromethane	ND	0.0093	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethane	ND	0.0093	mg/Kg-dry	1	12/5/2004
1,2-Dichloroethane	ND	0.0093	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethene	ND	0.0093	mg/Kg-dry	1	12/5/2004
cis-1,2-Dichloroethene	ND	0.0093	mg/Kg-dry	1	12/5/2004
trans-1,2-Dichloroethene	ND	0.0093	mg/Kg-dry	1	12/5/2004
1,2-Dichloropropane	ND	0.0093	mg/Kg-dry	1	12/5/2004
cis-1,3-Dichloropropene	ND	0.0093	mg/Kg-dry	1	12/5/2004
trans-1,3-Dichloropropene	ND	0.0093	mg/Kg-dry	1	12/5/2004
Ethylbenzene	ND	0.0093	mg/Kg-dry	1	12/5/2004
2-Hexanone	ND	0.019	mg/Kg-dry	1	12/5/2004
4-Methyl-2-pentanone	ND	0.019	mg/Kg-dry	1	12/5/2004
Methylene chloride	ND	0.019	mg/Kg-dry	1	12/5/2004
Methyl tert-butyl ether	ND	0.0093	mg/Kg-dry	1	12/5/2004
Styrene	ND	0.0093	mg/Kg-dry	1	12/5/2004
1,1,2,2-Tetrachloroethane	ND	0.0093	mg/Kg-dry	1	12/5/2004
Tetrachloroethene	ND	0.0093	mg/Kg-dry	1	12/5/2004
Toluene	ND	0.0093	mg/Kg-dry	1	12/5/2004
1,1,1-Trichloroethane	ND	0.0093	mg/Kg-dry	1	12/5/2004
1,1,2-Trichloroethane	ND	0.0093	mg/Kg-dry	1	12/5/2004
Trichloroethene	ND	0.0093	mg/Kg-dry	1	12/5/2004
Vinyl chloride	ND	0.0093	mg/Kg-dry	1	12/5/2004
Xylenes, Total	ND	0.019	mg/Kg-dry	1	12/5/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Page 1 of 21 H - Holding time exceeded

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB57-001

Lab Order: 0412018 **Tag Number:** 10-12'

Project: 32088, Willow Street Station-General Iron Collection Date: 11/30/2004 8:25:00 AM

Lab ID: 0412018-001B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF I	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SW	/3580A)	Prep	Date: 12/6/2004	Analyst: JF
TPH (Gasoline)	ND	29	*	mg/Kg-dry	1	12/7/2004
TPH (Diesel)	660	29	*	mg/Kg-dry	1	12/7/2004
TPH (Oil)	1900	29	*	mg/Kg-dry	1	12/7/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550E	B) Prep	Date: 12/4/2004	Analyst: VS
Acenaphthene	3.9	3.7	1	mg/Kg-dry	100	12/7/2004
Acenaphthylene	0.85	0.37	1	mg/Kg-dry	10	12/6/2004
Anthracene	11	3.7	1	mg/Kg-dry	100	12/7/2004
Benz(a)anthracene	18	3.7	1	mg/Kg-dry	100	12/7/2004
Benzo(b)fluoranthene	11	3.7	I	mg/Kg-dry	100	12/7/2004
Benzo(k)fluoranthene	12	3.7	ĺ	mg/Kg-dry	100	12/7/2004
Benzo(g,h,i)perylene	6.7	3.7	ĺ	mg/Kg-dry	100	12/7/2004
Benzo(a)pyrene	15	3.7	ı	mg/Kg-dry	100	12/7/2004
Chrysene	16	3.7	ı	mg/Kg-dry	100	12/7/2004
Dibenz(a,h)anthracene	1.8	0.37	1	mg/Kg-dry	10	12/6/2004
Fluoranthene	31	3.7		mg/Kg-dry	100	12/7/2004
Fluorene	6.4	3.7	1	mg/Kg-dry	100	12/7/2004
Indeno(1,2,3-cd)pyrene	6.9	3.7	1	mg/Kg-dry	100	12/7/2004
Naphthalene	4.1	3.7	1	mg/Kg-dry	100	12/7/2004
Phenanthrene	26	3.7	1	mg/Kg-dry	100	12/7/2004
Pyrene	29	3.7	1	mg/Kg-dry	100	12/7/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	/3550B)	Prep	Date: 12/4/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.48		mg/Kg-dry	1	12/7/2004
Bis(2-chloroethyl)ether	ND	0.48	1	mg/Kg-dry	1	12/7/2004
Bis(2-ethylhexyl)phthalate	ND	0.48		mg/Kg-dry	1	12/7/2004
4-Bromophenyl phenyl ether	ND	0.48	1	mg/Kg-dry	1	12/7/2004
Butyl benzyl phthalate	ND	0.48		mg/Kg-dry	1	12/7/2004
Carbazole	4.9	0.48		mg/Kg-dry	1	12/7/2004
4-Chloro-3-methylphenol	ND	0.48	1	mg/Kg-dry	1	12/7/2004
4-Chloroaniline	ND	0.48		mg/Kg-dry	1	12/7/2004
2-Chloronaphthalene	ND	0.48		mg/Kg-dry	1	12/7/2004
2-Chlorophenol	ND	0.48		mg/Kg-dry	1	12/7/2004
4-Chlorophenyl phenyl ether	ND	0.48		mg/Kg-dry	1	12/7/2004
Dibenzofuran	3.4	0.48		mg/Kg-dry	1	12/7/2004
1,2-Dichlorobenzene	ND	0.48		mg/Kg-dry	1	12/7/2004
1,3-Dichlorobenzene	ND	0.48		mg/Kg-dry	1	12/7/2004
1,4-Dichlorobenzene	ND	0.48		mg/Kg-dry	1	12/7/2004
3,3'-Dichlorobenzidine	ND	0.97		mg/Kg-dry	1	12/7/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 2 of 21

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Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB57-001

Lab Order: 0412018 **Tag Number:** 10-12'

Project: 32088, Willow Street Station-General Iron Collection Date: 11/30/2004 8:25:00 AM

Lab ID: 0412018-001B **Matrix:** Soil

Analyses	Result	RL Qualifi	ier Units	DF I	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW3550B)	Prep	Date: 12/4/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.48	mg/Kg-dry	1	12/7/2004
Diethyl phthalate	ND	0.48	mg/Kg-dry	1	12/7/2004
Dimethyl phthalate	ND	0.48	mg/Kg-dry	1	12/7/2004
Di-n-butyl phthalate	ND	0.48	mg/Kg-dry	1	12/7/2004
2,4-Dimethylphenol	ND	0.48	mg/Kg-dry	1	12/7/2004
4,6-Dinitro-2-methylphenol	ND	2.4	mg/Kg-dry	1	12/7/2004
2,4-Dinitrophenol	ND	2.4	mg/Kg-dry	1	12/7/2004
2,4-Dinitrotoluene	ND	0.25	mg/Kg-dry	1	12/7/2004
2,6-Dinitrotoluene	ND	0.25	mg/Kg-dry	1	12/7/2004
Di-n-octyl phthalate	ND	0.48	mg/Kg-dry	1	12/7/2004
Hexachlorobenzene	ND	0.48	mg/Kg-dry	1	12/7/2004
Hexachlorobutadiene	ND	0.48	mg/Kg-dry	1	12/7/2004
Hexachlorocyclopentadiene	ND	0.48	mg/Kg-dry	1	12/7/2004
Hexachloroethane	ND	0.48	mg/Kg-dry	1	12/7/2004
Isophorone	ND	0.48	mg/Kg-dry	1	12/7/2004
2-Methylnaphthalene	3	0.48	mg/Kg-dry	1	12/7/2004
2-Methylphenol	ND	0.48	mg/Kg-dry	1	12/7/2004
4-Methylphenol	2.7	0.48	mg/Kg-dry	1	12/7/2004
2-Nitroaniline	ND	2.4	mg/Kg-dry	1	12/7/2004
3-Nitroaniline	ND	2.4	mg/Kg-dry	1	12/7/2004
4-Nitroaniline	ND	2.4	mg/Kg-dry	1	12/7/2004
Nitrobenzene	ND	0.25	mg/Kg-dry	1	12/7/2004
2-Nitrophenol	ND	0.48	mg/Kg-dry	1	12/7/2004
4-Nitrophenol	ND	2.4	mg/Kg-dry	1	12/7/2004
N-Nitrosodi-n-propylamine	ND	0.25	mg/Kg-dry	1	12/7/2004
N-Nitrosodiphenylamine	ND	0.48	mg/Kg-dry	1	12/7/2004
2, 2'-oxybis(1-Chloropropane	ND	0.48	mg/Kg-dry	1	12/7/2004
Pentachlorophenol	ND	2.4	mg/Kg-dry	1	12/7/2004
Phenol	ND	0.48	mg/Kg-dry	1	12/7/2004
1,2,4-Trichlorobenzene	ND	0.48	mg/Kg-dry	1	12/7/2004
2,4,5-Trichlorophenol	ND	0.97	mg/Kg-dry	1	12/7/2004
2,4,6-Trichlorophenol	ND	0.48	mg/Kg-dry	1	12/7/2004
Percent Moisture	D2974	ı	Prep	Date: 12/2/2004	Analyst: RW
Percent Moisture	32.19	0.01 *	wt%	1	12/3/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547 Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client: Client Sample ID:** WSS-SB57-002

Lab Order: 0412018 Tag Number: 16-18'

Project: 32088, Willow Street Station-General Iron **Collection Date:** 11/30/2004 8:35:00 AM

Lab ID: 0412018-002A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50)35/8260E	B Prep	Date: 12/2/2004	Analyst: PS
Acetone	ND	0.028	mg/Kg-dry	1	12/5/2004
Benzene	ND	0.0057	mg/Kg-dry	1	12/5/2004
Bromodichloromethane	ND	0.0057	mg/Kg-dry	1	12/5/2004
Bromoform	ND	0.0057	mg/Kg-dry	1	12/5/2004
Bromomethane	ND	0.011	mg/Kg-dry	1	12/5/2004
2-Butanone	ND	0.011	mg/Kg-dry	1	12/5/2004
Carbon disulfide	ND	0.0057	mg/Kg-dry	1	12/5/2004
Carbon tetrachloride	ND	0.0057	mg/Kg-dry	1	12/5/2004
Chlorobenzene	ND	0.0057	mg/Kg-dry	1	12/5/2004
Chloroethane	ND	0.011	mg/Kg-dry	1	12/5/2004
Chloroform	ND	0.0057	mg/Kg-dry	1	12/5/2004
Chloromethane	ND	0.0057	mg/Kg-dry	1	12/5/2004
Dibromochloromethane	ND	0.0057	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethane	ND	0.0057	mg/Kg-dry	1	12/5/2004
1,2-Dichloroethane	ND	0.0057	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethene	ND	0.0057	mg/Kg-dry	1	12/5/2004
cis-1,2-Dichloroethene	ND	0.0057	mg/Kg-dry	1	12/5/2004
trans-1,2-Dichloroethene	ND	0.0057	mg/Kg-dry	1	12/5/2004
1,2-Dichloropropane	ND	0.0057	mg/Kg-dry	1	12/5/2004
cis-1,3-Dichloropropene	ND	0.0057	mg/Kg-dry	1	12/5/2004
trans-1,3-Dichloropropene	ND	0.0057	mg/Kg-dry	1	12/5/2004
Ethylbenzene	ND	0.0057	mg/Kg-dry	1	12/5/2004
2-Hexanone	ND	0.011	mg/Kg-dry	1	12/5/2004
4-Methyl-2-pentanone	ND	0.011	mg/Kg-dry	1	12/5/2004
Methylene chloride	ND	0.011	mg/Kg-dry	1	12/5/2004
Methyl tert-butyl ether	ND	0.0057	mg/Kg-dry	1	12/5/2004
Styrene	ND	0.0057	mg/Kg-dry	1	12/5/2004
1,1,2,2-Tetrachloroethane	ND	0.0057	mg/Kg-dry	1	12/5/2004
Tetrachloroethene	ND	0.0057	mg/Kg-dry	1	12/5/2004
Toluene	ND	0.0057	mg/Kg-dry	1	12/5/2004
1,1,1-Trichloroethane	ND	0.0057	mg/Kg-dry	1	12/5/2004
1,1,2-Trichloroethane	ND	0.0057	mg/Kg-dry	1	12/5/2004
Trichloroethene	ND	0.0057	mg/Kg-dry	1	12/5/2004
Vinyl chloride	ND	0.0057	mg/Kg-dry	1	12/5/2004
Xylenes, Total	ND	0.011	mg/Kg-dry	1	12/5/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB57-002

Lab Order: 0412018 **Tag Number:** 16-18'

Project: 32088, Willow Street Station- General Iron **Collection Date:** 11/30/2004 8:35:00 AM

Lab ID: 0412018-002B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SV	/3580A)	Prep	Date: 12/6/200 4	Analyst: JF
TPH (Gasoline)	ND	24	* r	ng/Kg-dry	1	12/7/2004
TPH (Diesel)	ND	24	* r	ng/Kg-dry	1	12/7/2004
TPH (Oil)	ND	24	* r	mg/Kg-dry	1	12/7/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550B) Prep	Date: 12/4/200 4	Analyst: VS
Acenaphthene	ND	0.03	r	ng/Kg-dry	1	12/5/2004
Acenaphthylene	ND	0.03	r	ng/Kg-dry	1	12/5/2004
Anthracene	ND	0.03	r	ng/Kg-dry	1	12/5/2004
Benz(a)anthracene	ND	0.03	r	ng/Kg-dry	1	12/5/2004
Benzo(b)fluoranthene	ND	0.03	r	ng/Kg-dry	1	12/5/2004
Benzo(k)fluoranthene	ND	0.03	r	ng/Kg-dry	1	12/5/2004
Benzo(g,h,i)perylene	ND	0.03	r	ng/Kg-dry	1	12/5/2004
Benzo(a)pyrene	ND	0.03	r	ng/Kg-dry	1	12/5/2004
Chrysene	0.037	0.03	r	ng/Kg-dry	1	12/5/2004
Dibenz(a,h)anthracene	ND	0.03	r	ng/Kg-dry	1	12/5/2004
Fluoranthene	0.056	0.03	r	ng/Kg-dry	1	12/5/2004
Fluorene	ND	0.03	r	ng/Kg-dry	1	12/5/2004
Indeno(1,2,3-cd)pyrene	ND	0.03	r	ng/Kg-dry	1	12/5/2004
Naphthalene	0.054	0.03	r	ng/Kg-dry	1	12/5/2004
Phenanthrene	0.11	0.03	r	ng/Kg-dry	1	12/5/2004
Pyrene	0.057	0.03	r	ng/Kg-dry	1	12/5/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	/3550B)	Prep	Date: 12/4/200 4	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.39	-	ng/Kg-dry	1	12/6/2004
Bis(2-chloroethyl)ether	ND	0.39	r	ng/Kg-dry	1	12/6/2004
Bis(2-ethylhexyl)phthalate	ND	0.39	r	ng/Kg-dry	1	12/6/2004
4-Bromophenyl phenyl ether	ND	0.39		ng/Kg-dry	1	12/6/2004
Butyl benzyl phthalate	ND	0.39		ng/Kg-dry	1	12/6/2004
Carbazole	ND	0.39		ng/Kg-dry	1	12/6/2004
4-Chloro-3-methylphenol	ND	0.39		ng/Kg-dry	1	12/6/2004
4-Chloroaniline	ND	0.39		ng/Kg-dry	1	12/6/2004
2-Chloronaphthalene	ND	0.39		ng/Kg-dry	1	12/6/2004
2-Chlorophenol	ND	0.39		ng/Kg-dry	1	12/6/2004
4-Chlorophenyl phenyl ether	ND	0.39		ng/Kg-dry	1	12/6/2004
Dibenzofuran	ND	0.39		ng/Kg-dry	1	12/6/2004
1,2-Dichlorobenzene	ND	0.39		ng/Kg-dry	1	12/6/2004
1,3-Dichlorobenzene	ND	0.39		ng/Kg-dry	1	12/6/2004
1,4-Dichlorobenzene	ND	0.39		ng/Kg-dry	1	12/6/2004
3,3'-Dichlorobenzidine	ND	0.79		ng/Kg-dry	1	12/6/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB57-002

Lab Order: 0412018 **Tag Number:** 16-18'

Project: 32088, Willow Street Station-General Iron Collection Date: 11/30/2004 8:35:00 AM

Lab ID: 0412018-002B **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF 1	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	3550B) Pre _l	Date: 12/4/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.39	mg/Kg-dry	1	12/6/2004
Diethyl phthalate	ND	0.39	mg/Kg-dry	1	12/6/2004
Dimethyl phthalate	ND	0.39	mg/Kg-dry	1	12/6/2004
Di-n-butyl phthalate	ND	0.39	mg/Kg-dry	1	12/6/2004
2,4-Dimethylphenol	ND	0.39	mg/Kg-dry	1	12/6/2004
4,6-Dinitro-2-methylphenol	ND	1.9	mg/Kg-dry	1	12/6/2004
2,4-Dinitrophenol	ND	1.9	mg/Kg-dry	1	12/6/2004
2,4-Dinitrotoluene	ND	0.2	mg/Kg-dry	1	12/6/2004
2,6-Dinitrotoluene	ND	0.2	mg/Kg-dry	1	12/6/2004
Di-n-octyl phthalate	ND	0.39	mg/Kg-dry	1	12/6/2004
Hexachlorobenzene	ND	0.39	mg/Kg-dry	1	12/6/2004
Hexachlorobutadiene	ND	0.39	mg/Kg-dry	1	12/6/2004
Hexachlorocyclopentadiene	ND	0.39	mg/Kg-dry	1	12/6/2004
Hexachloroethane	ND	0.39	mg/Kg-dry	1	12/6/2004
Isophorone	ND	0.39	mg/Kg-dry	1	12/6/2004
2-Methylnaphthalene	ND	0.39	mg/Kg-dry	1	12/6/2004
2-Methylphenol	ND	0.39	mg/Kg-dry	1	12/6/2004
4-Methylphenol	ND	0.39	mg/Kg-dry	1	12/6/2004
2-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/6/2004
3-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/6/2004
4-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/6/2004
Nitrobenzene	ND	0.2	mg/Kg-dry	1	12/6/2004
2-Nitrophenol	ND	0.39	mg/Kg-dry	1	12/6/2004
4-Nitrophenol	ND	1.9	mg/Kg-dry	1	12/6/2004
N-Nitrosodi-n-propylamine	ND	0.2	mg/Kg-dry	1	12/6/2004
N-Nitrosodiphenylamine	ND	0.39	mg/Kg-dry	1	12/6/2004
2, 2'-oxybis(1-Chloropropane	ND	0.39	mg/Kg-dry	1	12/6/2004
Pentachlorophenol	ND	1.9	mg/Kg-dry	1	12/6/2004
Phenol	ND	0.39	mg/Kg-dry	1	12/6/2004
1,2,4-Trichlorobenzene	ND	0.39	mg/Kg-dry	1	12/6/2004
2,4,5-Trichlorophenol	ND	0.79	mg/Kg-dry	1	12/6/2004
2,4,6-Trichlorophenol	ND	0.39	mg/Kg-dry	1	12/6/2004
Percent Moisture	D2974	4	Prej	Date: 12/2/2004	Analyst: RW
Percent Moisture	17.83	0.01	* wt%	1	12/3/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded Page

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2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB46-001

Lab Order: 0412018 **Tag Number:** 10-12'

Project: 32088, Willow Street Station- General Iron Collection Date: 11/30/2004 12:00:00 PM

Lab ID: 0412018-003A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50)35/8260E	B Prep	Date: 12/2/2004	Analyst: PS
Acetone	ND	0.036	mg/Kg-dry	1	12/5/2004
Benzene	ND	0.0073	mg/Kg-dry	1	12/5/2004
Bromodichloromethane	ND	0.0073	mg/Kg-dry	1	12/5/2004
Bromoform	ND	0.0073	mg/Kg-dry	1	12/5/2004
Bromomethane	ND	0.015	mg/Kg-dry	1	12/5/2004
2-Butanone	ND	0.015	mg/Kg-dry	1	12/5/2004
Carbon disulfide	ND	0.0073	mg/Kg-dry	1	12/5/2004
Carbon tetrachloride	ND	0.0073	mg/Kg-dry	1	12/5/2004
Chlorobenzene	ND	0.0073	mg/Kg-dry	1	12/5/2004
Chloroethane	ND	0.015	mg/Kg-dry	1	12/5/2004
Chloroform	ND	0.0073	mg/Kg-dry	1	12/5/2004
Chloromethane	ND	0.0073	mg/Kg-dry	1	12/5/2004
Dibromochloromethane	ND	0.0073	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethane	ND	0.0073	mg/Kg-dry	1	12/5/2004
1,2-Dichloroethane	ND	0.0073	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethene	ND	0.0073	mg/Kg-dry	1	12/5/2004
cis-1,2-Dichloroethene	ND	0.0073	mg/Kg-dry	1	12/5/2004
trans-1,2-Dichloroethene	ND	0.0073	mg/Kg-dry	1	12/5/2004
1,2-Dichloropropane	ND	0.0073	mg/Kg-dry	1	12/5/2004
cis-1,3-Dichloropropene	ND	0.0073	mg/Kg-dry	1	12/5/2004
trans-1,3-Dichloropropene	ND	0.0073	mg/Kg-dry	1	12/5/2004
Ethylbenzene	ND	0.0073	mg/Kg-dry	1	12/5/2004
2-Hexanone	ND	0.015	mg/Kg-dry	1	12/5/2004
4-Methyl-2-pentanone	ND	0.015	mg/Kg-dry	1	12/5/2004
Methylene chloride	ND	0.015	mg/Kg-dry	1	12/5/2004
Methyl tert-butyl ether	ND	0.0073	mg/Kg-dry	1	12/5/2004
Styrene	ND	0.0073	mg/Kg-dry	1	12/5/2004
1,1,2,2-Tetrachloroethane	ND	0.0073	mg/Kg-dry	1	12/5/2004
Tetrachloroethene	ND	0.0073	mg/Kg-dry	1	12/5/2004
Toluene	ND	0.0073	mg/Kg-dry	1	12/5/2004
1,1,1-Trichloroethane	ND	0.0073	mg/Kg-dry	1	12/5/2004
1,1,2-Trichloroethane	ND	0.0073	mg/Kg-dry	1	12/5/2004
Trichloroethene	ND	0.0073	mg/Kg-dry	1	12/5/2004
Vinyl chloride	ND	0.0073	mg/Kg-dry	1	12/5/2004
Xylenes, Total	ND	0.015	mg/Kg-dry	1	12/5/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client:** Client Sample ID: WSS-SB46-001

Lab Order: 0412018 Tag Number: 10-12'

Project: 32088, Willow Street Station-General Iron **Collection Date:** 11/30/2004 12:00:00 PM

Lab ID: Matrix: 0412018-003B

		RL	Qualifier	Units	DF I	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SW	/3580A)	Prep	Date: 12/6/2004	Analyst: JF
TPH (Gasoline)	ND	26	* n	ng/Kg-dry	1	12/7/2004
TPH (Diesel)	140	26	* n	ng/Kg-dry	1	12/7/2004
TPH (Oil)	410	26	* n	ng/Kg-dry	1	12/7/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550B) Prep	Date: 12/4/2004	Analyst: VS
Acenaphthene	4.9	3.3	n	ng/Kg-dry	100	12/7/2004
Acenaphthylene	0.73	0.33	n	ng/Kg-dry	10	12/6/2004
Anthracene	6.4	3.3	n	ng/Kg-dry	100	12/7/2004
Benz(a)anthracene	5.8	3.3	n	ng/Kg-dry	100	12/7/2004
Benzo(b)fluoranthene	4.5	3.3	n	ng/Kg-dry	100	12/7/2004
Benzo(k)fluoranthene	4.1	0.33	n	ng/Kg-dry	10	12/6/2004
Benzo(g,h,i)perylene	2.7	0.33	n	ng/Kg-dry	10	12/6/2004
Benzo(a)pyrene	5.9	3.3	n	ng/Kg-dry	100	12/7/2004
Chrysene	5.4	3.3	n	ng/Kg-dry	100	12/7/2004
Dibenz(a,h)anthracene	0.83	0.33	n	ng/Kg-dry	10	12/6/2004
Fluoranthene	13	3.3	n	ng/Kg-dry	100	12/7/2004
Fluorene	3.8	3.3	n	ng/Kg-dry	100	12/7/2004
Indeno(1,2,3-cd)pyrene	2.4	0.33	n	ng/Kg-dry	10	12/6/2004
Naphthalene	6.5	3.3	n	ng/Kg-dry	100	12/7/2004
Phenanthrene	17	3.3	n	ng/Kg-dry	100	12/7/2004
Pyrene	14	3.3		ng/Kg-dry	100	12/7/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	3550B)	Prep	Date: 12/4/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.43		ng/Kg-dry	1	12/8/2004
Bis(2-chloroethyl)ether	ND	0.43		ng/Kg-dry	1	12/8/2004
Bis(2-ethylhexyl)phthalate	ND	0.43		ng/Kg-dry	1	12/8/2004
4-Bromophenyl phenyl ether	ND	0.43	n	ng/Kg-dry	1	12/8/2004
Butyl benzyl phthalate	ND	0.43		ng/Kg-dry	1	12/8/2004
Carbazole	0.87	0.43		ng/Kg-dry	1	12/8/2004
4-Chloro-3-methylphenol	ND	0.43		ng/Kg-dry	1	12/8/2004
4-Chloroaniline	ND	0.43		ng/Kg-dry	1	12/8/2004
2-Chloronaphthalene	ND	0.43		ng/Kg-dry	1	12/8/2004
2-Chlorophenol	ND	0.43		ng/Kg-dry	1	12/8/2004
4-Chlorophenyl phenyl ether	ND	0.43		ng/Kg-dry	1	12/8/2004
Dibenzofuran	1.8	0.43		ng/Kg-dry	1	12/8/2004
1,2-Dichlorobenzene	ND	0.43		ng/Kg-dry	1	12/8/2004
1,3-Dichlorobenzene	ND	0.43		ng/Kg-dry	1	12/8/2004
1,4-Dichlorobenzene	ND	0.43		ng/Kg-dry	1	12/8/2004
3,3'-Dichlorobenzidine	ND	0.86		ng/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Page 8 of 21 H - Holding time exceeded

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB46-001

Lab Order: 0412018 **Tag Number:** 10-12'

Project: 32088, Willow Street Station- General Iron Collection Date: 11/30/2004 12:00:00 PM

Lab ID: 0412018-003B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF I	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW3	3550B)	Prep	Date: 12/4/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.43	mg	/Kg-dry	1	12/8/2004
Diethyl phthalate	ND	0.43	mg	/Kg-dry	1	12/8/2004
Dimethyl phthalate	ND	0.43	mg	/Kg-dry	1	12/8/2004
Di-n-butyl phthalate	ND	0.43	mg	ı/Kg-dry	1	12/8/2004
2,4-Dimethylphenol	ND	0.43	mg	/Kg-dry	1	12/8/2004
4,6-Dinitro-2-methylphenol	ND	2.1	mg	/Kg-dry	1	12/8/2004
2,4-Dinitrophenol	ND	2.1	mg	/Kg-dry	1	12/8/2004
2,4-Dinitrotoluene	ND	0.22	mg	/Kg-dry	1	12/8/2004
2,6-Dinitrotoluene	ND	0.22	mg	ı/Kg-dry	1	12/8/2004
Di-n-octyl phthalate	ND	0.43	mg	/Kg-dry	1	12/8/2004
Hexachlorobenzene	ND	0.43	mg	/Kg-dry	1	12/8/2004
Hexachlorobutadiene	ND	0.43	mg	ı/Kg-dry	1	12/8/2004
Hexachlorocyclopentadiene	ND	0.43	mg	ı/Kg-dry	1	12/8/2004
Hexachloroethane	ND	0.43	mg	ı/Kg-dry	1	12/8/2004
Isophorone	ND	0.43	mg	ı/Kg-dry	1	12/8/2004
2-Methylnaphthalene	2.8	0.43	mg	ı/Kg-dry	1	12/8/2004
2-Methylphenol	ND	0.43	mg	ı/Kg-dry	1	12/8/2004
4-Methylphenol	ND	0.43	mg	ı/Kg-dry	1	12/8/2004
2-Nitroaniline	ND	2.1	mg	ı/Kg-dry	1	12/8/2004
3-Nitroaniline	ND	2.1	mg	ı/Kg-dry	1	12/8/2004
4-Nitroaniline	ND	2.1	mg	ı/Kg-dry	1	12/8/2004
Nitrobenzene	ND	0.22	mg	ı/Kg-dry	1	12/8/2004
2-Nitrophenol	ND	0.43	mg	ı/Kg-dry	1	12/8/2004
4-Nitrophenol	ND	2.1	mg	ı/Kg-dry	1	12/8/2004
N-Nitrosodi-n-propylamine	ND	0.22	mg	ı/Kg-dry	1	12/8/2004
N-Nitrosodiphenylamine	ND	0.43	mg	ı/Kg-dry	1	12/8/2004
2, 2'-oxybis(1-Chloropropane	ND	0.43	mg	ı/Kg-dry	1	12/8/2004
Pentachlorophenol	ND	2.1	mg	J/Kg-dry	1	12/8/2004
Phenol	ND	0.43	mg	J/Kg-dry	1	12/8/2004
1,2,4-Trichlorobenzene	ND	0.43	mg	/Kg-dry	1	12/8/2004
2,4,5-Trichlorophenol	ND	0.86	mg	/Kg-dry	1	12/8/2004
2,4,6-Trichlorophenol	ND	0.43	mg	/Kg-dry	1	12/8/2004
Percent Moisture	D2974				Date: 12/2/2004	Analyst: RW
Percent Moisture	25.16	0.01	*	wt%	1	12/3/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client: Client Sample ID:** WSS-SB46-002

Lab Order: 0412018 Tag Number: 16-18'

Project: 32088, Willow Street Station-General Iron **Collection Date:** 11/30/2004 12:10:00 PM

Lab ID: 0412018-004A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50)35/8260E	B Prep	Date: 12/2/200 4	4 Analyst: PS
Acetone	ND	0.031	mg/Kg-dry	1	12/5/2004
Benzene	ND	0.0062	mg/Kg-dry	1	12/5/2004
Bromodichloromethane	ND	0.0062	mg/Kg-dry	1	12/5/2004
Bromoform	ND	0.0062	mg/Kg-dry	1	12/5/2004
Bromomethane	ND	0.012	mg/Kg-dry	1	12/5/2004
2-Butanone	ND	0.012	mg/Kg-dry	1	12/5/2004
Carbon disulfide	ND	0.0062	mg/Kg-dry	1	12/5/2004
Carbon tetrachloride	ND	0.0062	mg/Kg-dry	1	12/5/2004
Chlorobenzene	ND	0.0062	mg/Kg-dry	1	12/5/2004
Chloroethane	ND	0.012	mg/Kg-dry	1	12/5/2004
Chloroform	ND	0.0062	mg/Kg-dry	1	12/5/2004
Chloromethane	ND	0.0062	mg/Kg-dry	1	12/5/2004
Dibromochloromethane	ND	0.0062	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethane	ND	0.0062	mg/Kg-dry	1	12/5/2004
1,2-Dichloroethane	ND	0.0062	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethene	ND	0.0062	mg/Kg-dry	1	12/5/2004
cis-1,2-Dichloroethene	ND	0.0062	mg/Kg-dry	1	12/5/2004
trans-1,2-Dichloroethene	ND	0.0062	mg/Kg-dry	1	12/5/2004
1,2-Dichloropropane	ND	0.0062	mg/Kg-dry	1	12/5/2004
cis-1,3-Dichloropropene	ND	0.0062	mg/Kg-dry	1	12/5/2004
trans-1,3-Dichloropropene	ND	0.0062	mg/Kg-dry	1	12/5/2004
Ethylbenzene	ND	0.0062	mg/Kg-dry	1	12/5/2004
2-Hexanone	ND	0.012	mg/Kg-dry	1	12/5/2004
4-Methyl-2-pentanone	ND	0.012	mg/Kg-dry	1	12/5/2004
Methylene chloride	ND	0.012	mg/Kg-dry	1	12/5/2004
Methyl tert-butyl ether	ND	0.0062	mg/Kg-dry	1	12/5/2004
Styrene	ND	0.0062	mg/Kg-dry	1	12/5/2004
1,1,2,2-Tetrachloroethane	ND	0.0062	mg/Kg-dry	1	12/5/2004
Tetrachloroethene	ND	0.0062	mg/Kg-dry	1	12/5/2004
Toluene	ND	0.0062	mg/Kg-dry	1	12/5/2004
1,1,1-Trichloroethane	ND	0.0062	mg/Kg-dry	1	12/5/2004
1,1,2-Trichloroethane	ND	0.0062	mg/Kg-dry	1	12/5/2004
Trichloroethene	ND	0.0062	mg/Kg-dry	1	12/5/2004
Vinyl chloride	ND	0.0062	mg/Kg-dry	1	12/5/2004
Xylenes, Total	ND	0.012	mg/Kg-dry	1	12/5/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 10 of 21

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client:** Client Sample ID: WSS-SB46-002

Lab Order: 0412018 Tag Number: 16-18'

Collection Date: 11/30/2004 12:10:00 PM **Project:** 32088, Willow Street Station-General Iron

Lab ID: 0412018-004B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW80)15M (SW	/3580A)	Prep	Date: 12/6/200	4 Analyst: JF
TPH (Gasoline)	ND	24	* n	ng/Kg-dry	1	12/7/2004
TPH (Diesel)	ND	24	* n	ng/Kg-dry	1	12/7/2004
TPH (Oil)	ND	24	* n	ng/Kg-dry	1	12/7/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550B) Prep	Date: 12/4/200	4 Analyst: VS
Acenaphthene	0.17	0.031	n	ng/Kg-dry	1	12/5/2004
Acenaphthylene	0.033	0.031	n	ng/Kg-dry	1	12/5/2004
Anthracene	0.19	0.031	n	ng/Kg-dry	1	12/5/2004
Benz(a)anthracene	0.17	0.031	n	ng/Kg-dry	1	12/5/2004
Benzo(b)fluoranthene	0.075	0.031	n	ng/Kg-dry	1	12/5/2004
Benzo(k)fluoranthene	0.12	0.031	n	ng/Kg-dry	1	12/5/2004
Benzo(g,h,i)perylene	0.046	0.031	n	ng/Kg-dry	1	12/5/2004
Benzo(a)pyrene	0.086	0.031	n	ng/Kg-dry	1	12/5/2004
Chrysene	0.2	0.031	n	ng/Kg-dry	1	12/5/2004
Dibenz(a,h)anthracene	ND	0.031		ng/Kg-dry	1	12/5/2004
Fluoranthene	0.42	0.31		ng/Kg-dry	10	12/6/2004
Fluorene	0.13	0.031		ng/Kg-dry	1	12/5/2004
Indeno(1,2,3-cd)pyrene	0.035	0.031		ng/Kg-dry	1	12/5/2004
Naphthalene	0.4	0.31		ng/Kg-dry	10	12/6/2004
Phenanthrene	0.6	0.31		ng/Kg-dry	10	12/6/2004
Pyrene	0.52	0.31		ng/Kg-dry	10	12/6/2004
Semivolatile Organic Compounds by GC/MS	SW82	270C (SW	3550B)	Pren	Date: 12/4/200	4 Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.42		ng/Kg-dry	1	12/7/2004
Bis(2-chloroethyl)ether	ND	0.42		ng/Kg-dry	1	12/7/2004
Bis(2-ethylhexyl)phthalate	ND	0.42		ng/Kg-dry	1	12/7/2004
4-Bromophenyl phenyl ether	ND	0.42		ng/Kg-dry	1	12/7/2004
Butyl benzyl phthalate	ND	0.42		ng/Kg-dry	1	12/7/2004
Carbazole	ND	0.42		ng/Kg-dry	1	12/7/2004
4-Chloro-3-methylphenol	ND	0.42		ng/Kg-dry	1	12/7/2004
4-Chloroaniline	ND	0.42		ng/Kg-dry	1	12/7/2004
2-Chloronaphthalene	ND	0.42		ng/Kg-dry	1	12/7/2004
2-Chlorophenol	ND	0.42		ng/Kg-dry	1	12/7/2004
4-Chlorophenyl phenyl ether	ND	0.42		ng/Kg-dry	1	12/7/2004
Dibenzofuran	ND	0.42		ng/Kg-dry	1	12/7/2004
1,2-Dichlorobenzene	ND	0.42		ng/Kg-dry	1	12/7/2004
1,3-Dichlorobenzene	ND	0.42		ng/Kg-dry	1	12/7/2004
1,4-Dichlorobenzene	ND	0.42		ng/Kg-dry	1	12/7/2004
3,3'-Dichlorobenzidine	ND	0.42		ng/Kg-dry	1	12/7/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Page 11 of 21 H - Holding time exceeded

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB46-002

Lab Order: 0412018 **Tag Number:** 16-18'

Project: 32088, Willow Street Station- General Iron Collection Date: 11/30/2004 12:10:00 PM

Lab ID: 0412018-004B **Matrix:** Soil

Analyses	Result	RL (Qualifier Units	DF I	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW35	550B) Prep	Date: 12/4/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.42	mg/Kg-dry	1	12/7/2004
Diethyl phthalate	ND	0.42	mg/Kg-dry	1	12/7/2004
Dimethyl phthalate	ND	0.42	mg/Kg-dry	1	12/7/2004
Di-n-butyl phthalate	ND	0.42	mg/Kg-dry	1	12/7/2004
2,4-Dimethylphenol	ND	0.42	mg/Kg-dry	1	12/7/2004
4,6-Dinitro-2-methylphenol	ND	2	mg/Kg-dry	1	12/7/2004
2,4-Dinitrophenol	ND	2	mg/Kg-dry	1	12/7/2004
2,4-Dinitrotoluene	ND	0.21	mg/Kg-dry	1	12/7/2004
2,6-Dinitrotoluene	ND	0.21	mg/Kg-dry	1	12/7/2004
Di-n-octyl phthalate	ND	0.42	mg/Kg-dry	1	12/7/2004
Hexachlorobenzene	ND	0.42	mg/Kg-dry	1	12/7/2004
Hexachlorobutadiene	ND	0.42	mg/Kg-dry	1	12/7/2004
Hexachlorocyclopentadiene	ND	0.42	mg/Kg-dry	1	12/7/2004
Hexachloroethane	ND	0.42	mg/Kg-dry	1	12/7/2004
Isophorone	ND	0.42	mg/Kg-dry	1	12/7/2004
2-Methylnaphthalene	ND	0.42	mg/Kg-dry	1	12/7/2004
2-Methylphenol	ND	0.42	mg/Kg-dry	1	12/7/2004
4-Methylphenol	ND	0.42	mg/Kg-dry	1	12/7/2004
2-Nitroaniline	ND	2	mg/Kg-dry	1	12/7/2004
3-Nitroaniline	ND	2	mg/Kg-dry	1	12/7/2004
4-Nitroaniline	ND	2	mg/Kg-dry	1	12/7/2004
Nitrobenzene	ND	0.21	mg/Kg-dry	1	12/7/2004
2-Nitrophenol	ND	0.42	mg/Kg-dry	1	12/7/2004
4-Nitrophenol	ND	2	mg/Kg-dry	1	12/7/2004
N-Nitrosodi-n-propylamine	ND	0.21	mg/Kg-dry	1	12/7/2004
N-Nitrosodiphenylamine	ND	0.42	mg/Kg-dry	1	12/7/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.42	mg/Kg-dry	1	12/7/2004
Pentachlorophenol	ND	2	mg/Kg-dry	1	12/7/2004
Phenol	ND	0.42	mg/Kg-dry	1	12/7/2004
1,2,4-Trichlorobenzene	ND	0.42	mg/Kg-dry	1	12/7/2004
2,4,5-Trichlorophenol	ND	0.83	mg/Kg-dry	1	12/7/2004
2,4,6-Trichlorophenol	ND	0.42	mg/Kg-dry	1	12/7/2004
Percent Moisture	D2974	1	Prep	Date: 12/2/2004	Analyst: RW
Percent Moisture	22.29	0.01	* wt%	1	12/3/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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iding time exceeded

2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB48-001

Lab Order: 0412018 **Tag Number:** 8-10'

Project: 32088, Willow Street Station- General Iron Collection Date: 11/30/2004 2:35:00 PM

Lab ID: 0412018-005A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF I	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50	035/8260E	Prep	Date: 12/2/2004	Analyst: PS
Acetone	ND	0.036	mg/Kg-dry	1	12/5/2004
Benzene	ND	0.0072	mg/Kg-dry	1	12/5/2004
Bromodichloromethane	ND	0.0072	mg/Kg-dry	1	12/5/2004
Bromoform	ND	0.0072	mg/Kg-dry	1	12/5/2004
Bromomethane	ND	0.014	mg/Kg-dry	1	12/5/2004
2-Butanone	ND	0.014	mg/Kg-dry	1	12/5/2004
Carbon disulfide	ND	0.0072	mg/Kg-dry	1	12/5/2004
Carbon tetrachloride	ND	0.0072	mg/Kg-dry	1	12/5/2004
Chlorobenzene	ND	0.0072	mg/Kg-dry	1	12/5/2004
Chloroethane	ND	0.014	mg/Kg-dry	1	12/5/2004
Chloroform	ND	0.0072	mg/Kg-dry	1	12/5/2004
Chloromethane	ND	0.0072	mg/Kg-dry	1	12/5/2004
Dibromochloromethane	ND	0.0072	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethane	ND	0.0072	mg/Kg-dry	1	12/5/2004
1,2-Dichloroethane	ND	0.0072	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethene	ND	0.0072	mg/Kg-dry	1	12/5/2004
cis-1,2-Dichloroethene	ND	0.0072	mg/Kg-dry	1	12/5/2004
trans-1,2-Dichloroethene	ND	0.0072	mg/Kg-dry	1	12/5/2004
1,2-Dichloropropane	ND	0.0072	mg/Kg-dry	1	12/5/2004
cis-1,3-Dichloropropene	ND	0.0072	mg/Kg-dry	1	12/5/2004
trans-1,3-Dichloropropene	ND	0.0072	mg/Kg-dry	1	12/5/2004
Ethylbenzene	ND	0.0072	mg/Kg-dry	1	12/5/2004
2-Hexanone	ND	0.014	mg/Kg-dry	1	12/5/2004
4-Methyl-2-pentanone	ND	0.014	mg/Kg-dry	1	12/5/2004
Methylene chloride	ND	0.014	mg/Kg-dry	1	12/5/2004
Methyl tert-butyl ether	ND	0.0072	mg/Kg-dry	1	12/5/2004
Styrene	ND	0.0072	mg/Kg-dry	1	12/5/2004
1,1,2,2-Tetrachloroethane	ND	0.0072	mg/Kg-dry	1	12/5/2004
Tetrachloroethene	ND	0.0072	mg/Kg-dry	1	12/5/2004
Toluene	ND	0.0072	mg/Kg-dry	1	12/5/2004
1,1,1-Trichloroethane	ND	0.0072	mg/Kg-dry	1	12/5/2004
1,1,2-Trichloroethane	ND	0.0072	mg/Kg-dry	1	12/5/2004
Trichloroethene	ND	0.0072	mg/Kg-dry	1	12/5/2004
Vinyl chloride	ND	0.0072	mg/Kg-dry	1	12/5/2004
Xylenes, Total	ND	0.014	mg/Kg-dry	1	12/5/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

K - KI D outside accepted recovery film

E - Value above quantitation range H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB48-001

Lab Order: 0412018 **Tag Number:** 8-10'

Project: 32088, Willow Street Station- General Iron Collection Date: 11/30/2004 2:35:00 PM

Lab ID: 0412018-005B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SV	/3580A)	Prep	Date: 12/6/2004	Analyst: JF
TPH (Gasoline)	ND	25	-	mg/Kg-dry	1	12/7/2004
TPH (Diesel)	83	25	* 1	mg/Kg-dry	1	12/7/2004
TPH (Oil)	270	25	* 1	mg/Kg-dry	1	12/7/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550E	B) Prep	Date: 12/4/2004	Analyst: VS
Acenaphthene	5.9	3.4		mg/Kg-dry	100	12/7/2004
Acenaphthylene	0.99	0.34	1	mg/Kg-dry	10	12/6/2004
Anthracene	9.5	3.4	1	mg/Kg-dry	100	12/7/2004
Benz(a)anthracene	8.6	3.4	1	mg/Kg-dry	100	12/7/2004
Benzo(b)fluoranthene	5.5	3.4	1	mg/Kg-dry	100	12/7/2004
Benzo(k)fluoranthene	6.2	3.4	1	mg/Kg-dry	100	12/7/2004
Benzo(g,h,i)perylene	5.5	3.4	1	mg/Kg-dry	100	12/7/2004
Benzo(a)pyrene	9.8	3.4	I	mg/Kg-dry	100	12/7/2004
Chrysene	8.1	3.4	I	mg/Kg-dry	100	12/7/2004
Dibenz(a,h)anthracene	1.2	0.34	I	mg/Kg-dry	10	12/6/2004
Fluoranthene	20	3.4	I	mg/Kg-dry	100	12/7/2004
Fluorene	3.5	3.4	i	mg/Kg-dry	100	12/7/2004
Indeno(1,2,3-cd)pyrene	4.2	3.4	i	mg/Kg-dry	100	12/7/2004
Naphthalene	5.3	3.4	i	mg/Kg-dry	100	12/7/2004
Phenanthrene	21	3.4		mg/Kg-dry	100	12/7/2004
Pyrene	22	3.4		mg/Kg-dry	100	12/7/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	/3550B)	Prep	Date: 12/4/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.44	_	mg/Kg-dry	1	12/7/2004
Bis(2-chloroethyl)ether	ND	0.44	ı	mg/Kg-dry	1	12/7/2004
Bis(2-ethylhexyl)phthalate	ND	0.44		mg/Kg-dry	1	12/7/2004
4-Bromophenyl phenyl ether	ND	0.44		mg/Kg-dry	1	12/7/2004
Butyl benzyl phthalate	ND	0.44		mg/Kg-dry	1	12/7/2004
Carbazole	0.57	0.44		mg/Kg-dry	1	12/7/2004
4-Chloro-3-methylphenol	ND	0.44		mg/Kg-dry	1	12/7/2004
4-Chloroaniline	ND	0.44		mg/Kg-dry	1	12/7/2004
2-Chloronaphthalene	ND	0.44		mg/Kg-dry	1	12/7/2004
2-Chlorophenol	ND	0.44		mg/Kg-dry	1	12/7/2004
4-Chlorophenyl phenyl ether	ND	0.44		mg/Kg-dry	1	12/7/2004
Dibenzofuran	1.5	0.44		mg/Kg-dry	1	12/7/2004
1,2-Dichlorobenzene	ND	0.44		mg/Kg-dry	1	12/7/2004
1,3-Dichlorobenzene	ND	0.44		mg/Kg-dry	1	12/7/2004
1,4-Dichlorobenzene	ND	0.44		mg/Kg-dry	1	12/7/2004
3,3´-Dichlorobenzidine	ND	0.89		mg/Kg-dry	1	12/7/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB48-001

Lab Order: 0412018 **Tag Number:** 8-10'

Project: 32088, Willow Street Station- General Iron Collection Date: 11/30/2004 2:35:00 PM

Lab ID: 0412018-005B **Matrix:** Soil

Analyses	Result	RL Qualifi	ier Units	DF I	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW3550B)	Prep	Date: 12/4/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.44	mg/Kg-dry	1	12/7/2004
Diethyl phthalate	ND	0.44	mg/Kg-dry	1	12/7/2004
Dimethyl phthalate	ND	0.44	mg/Kg-dry	1	12/7/2004
Di-n-butyl phthalate	ND	0.44	mg/Kg-dry	1	12/7/2004
2,4-Dimethylphenol	ND	0.44	mg/Kg-dry	1	12/7/2004
4,6-Dinitro-2-methylphenol	ND	2.2	mg/Kg-dry	1	12/7/2004
2,4-Dinitrophenol	ND	2.2	mg/Kg-dry	1	12/7/2004
2,4-Dinitrotoluene	ND	0.23	mg/Kg-dry	1	12/7/2004
2,6-Dinitrotoluene	ND	0.23	mg/Kg-dry	1	12/7/2004
Di-n-octyl phthalate	ND	0.44	mg/Kg-dry	1	12/7/2004
Hexachlorobenzene	ND	0.44	mg/Kg-dry	1	12/7/2004
Hexachlorobutadiene	ND	0.44	mg/Kg-dry	1	12/7/2004
Hexachlorocyclopentadiene	ND	0.44	mg/Kg-dry	1	12/7/2004
Hexachloroethane	ND	0.44	mg/Kg-dry	1	12/7/2004
Isophorone	ND	0.44	mg/Kg-dry	1	12/7/2004
2-Methylnaphthalene	2.5	0.44	mg/Kg-dry	1	12/7/2004
2-Methylphenol	ND	0.44	mg/Kg-dry	1	12/7/2004
4-Methylphenol	ND	0.44	mg/Kg-dry	1	12/7/2004
2-Nitroaniline	ND	2.2	mg/Kg-dry	1	12/7/2004
3-Nitroaniline	ND	2.2	mg/Kg-dry	1	12/7/2004
4-Nitroaniline	ND	2.2	mg/Kg-dry	1	12/7/2004
Nitrobenzene	ND	0.23	mg/Kg-dry	1	12/7/2004
2-Nitrophenol	ND	0.44	mg/Kg-dry	1	12/7/2004
4-Nitrophenol	ND	2.2	mg/Kg-dry	1	12/7/2004
N-Nitrosodi-n-propylamine	ND	0.23	mg/Kg-dry	1	12/7/2004
N-Nitrosodiphenylamine	ND	0.44	mg/Kg-dry	1	12/7/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.44	mg/Kg-dry	1	12/7/2004
Pentachlorophenol	ND	2.2	mg/Kg-dry	1	12/7/2004
Phenol	ND	0.44	mg/Kg-dry	1	12/7/2004
1,2,4-Trichlorobenzene	ND	0.44	mg/Kg-dry	1	12/7/2004
2,4,5-Trichlorophenol	ND	0.89	mg/Kg-dry	1	12/7/2004
2,4,6-Trichlorophenol	ND	0.44	mg/Kg-dry	1	12/7/2004
Percent Moisture	D2974	1	Prep	Date: 12/2/2004	Analyst: RW
Percent Moisture	26.50	0.01 *	wt%	1	12/3/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB48-002

Lab Order: 0412018 **Tag Number:** 18-20'

Project: 32088, Willow Street Station- General Iron Collection Date: 11/30/2004 2:45:00 PM

Lab ID: 0412018-006A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50	035/8260B	Prep	Date: 12/2/200	4 Analyst: PS
Acetone	ND	0.03	mg/Kg-dry	1	12/5/2004
Benzene	ND	0.0059	mg/Kg-dry	1	12/5/2004
Bromodichloromethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
Bromoform	ND	0.0059	mg/Kg-dry	1	12/5/2004
Bromomethane	ND	0.012	mg/Kg-dry	1	12/5/2004
2-Butanone	ND	0.012	mg/Kg-dry	1	12/5/2004
Carbon disulfide	ND	0.0059	mg/Kg-dry	1	12/5/2004
Carbon tetrachloride	ND	0.0059	mg/Kg-dry	1	12/5/2004
Chlorobenzene	ND	0.0059	mg/Kg-dry	1	12/5/2004
Chloroethane	ND	0.012	mg/Kg-dry	1	12/5/2004
Chloroform	ND	0.0059	mg/Kg-dry	1	12/5/2004
Chloromethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
Dibromochloromethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
1,2-Dichloroethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethene	ND	0.0059	mg/Kg-dry	1	12/5/2004
cis-1,2-Dichloroethene	ND	0.0059	mg/Kg-dry	1	12/5/2004
trans-1,2-Dichloroethene	ND	0.0059	mg/Kg-dry	1	12/5/2004
1,2-Dichloropropane	ND	0.0059	mg/Kg-dry	1	12/5/2004
cis-1,3-Dichloropropene	ND	0.0059	mg/Kg-dry	1	12/5/2004
trans-1,3-Dichloropropene	ND	0.0059	mg/Kg-dry	1	12/5/2004
Ethylbenzene	ND	0.0059	mg/Kg-dry	1	12/5/2004
2-Hexanone	ND	0.012	mg/Kg-dry	1	12/5/2004
4-Methyl-2-pentanone	ND	0.012	mg/Kg-dry	1	12/5/2004
Methylene chloride	ND	0.012	mg/Kg-dry	1	12/5/2004
Methyl tert-butyl ether	ND	0.0059	mg/Kg-dry	1	12/5/2004
Styrene	ND	0.0059	mg/Kg-dry	1	12/5/2004
1,1,2,2-Tetrachloroethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
Tetrachloroethene	ND	0.0059	mg/Kg-dry	1	12/5/2004
Toluene	ND	0.0059	mg/Kg-dry	1	12/5/2004
1,1,1-Trichloroethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
1,1,2-Trichloroethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
Trichloroethene	ND	0.0059	mg/Kg-dry	1	12/5/2004
Vinyl chloride	ND	0.0059	mg/Kg-dry	1	12/5/2004
Xylenes, Total	ND	0.012	mg/Kg-dry	1	12/5/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB48-002

Lab Order: 0412018 **Tag Number:** 18-20'

Project: 32088, Willow Street Station- General Iron Collection Date: 11/30/2004 2:45:00 PM

Lab ID: 0412018-006B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF I	Date Analyzed
Total Petroleum Hydrocarbons	SW8	015M (SW	/3580A)	Prep	Date: 12/6/2004	Analyst: JF
TPH (Gasoline)	ND	24	*	mg/Kg-dry	1	12/7/2004
TPH (Diesel)	ND	24	*	mg/Kg-dry	1	12/7/2004
TPH (Oil)	ND	24	*	mg/Kg-dry	1	12/7/2004
Polynuclear Aromatic Hydrocarbons	SW8	270C-SIM	(SW3550I	B) Prep	Date: 12/4/2004	Analyst: VS
Acenaphthene	0.41	0.31		mg/Kg-dry	10	12/6/2004
Acenaphthylene	ND	0.031		mg/Kg-dry	1	12/5/2004
Anthracene	0.16	0.031		mg/Kg-dry	1	12/5/2004
Benz(a)anthracene	0.11	0.031		mg/Kg-dry	1	12/5/2004
Benzo(b)fluoranthene	0.063	0.031		mg/Kg-dry	1	12/5/2004
Benzo(k)fluoranthene	0.082	0.031		mg/Kg-dry	1	12/5/2004
Benzo(g,h,i)perylene	0.034	0.031		mg/Kg-dry	1	12/5/2004
Benzo(a)pyrene	0.088	0.031		mg/Kg-dry	1	12/5/2004
Chrysene	0.14	0.031		mg/Kg-dry	1	12/5/2004
Dibenz(a,h)anthracene	ND	0.031		mg/Kg-dry	1	12/5/2004
Fluoranthene	0.22	0.031		mg/Kg-dry	1	12/5/2004
Fluorene	0.26	0.031		mg/Kg-dry	1	12/5/2004
Indeno(1,2,3-cd)pyrene	ND	0.031		mg/Kg-dry	1	12/5/2004
Naphthalene	7.8	3.1		mg/Kg-dry	100	12/7/2004
Phenanthrene	0.52	0.31		mg/Kg-dry	10	12/6/2004
Pyrene	0.21	0.031		mg/Kg-dry	1	12/5/2004
Semivolatile Organic Compounds by GC/MS	SW8	270C (SW	3550B)	Prep	Date: 12/4/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.41		mg/Kg-dry	1	12/6/2004
Bis(2-chloroethyl)ether	ND	0.41		mg/Kg-dry	1	12/6/2004
Bis(2-ethylhexyl)phthalate	ND	0.41		mg/Kg-dry	1	12/6/2004
4-Bromophenyl phenyl ether	ND	0.41		mg/Kg-dry	1	12/6/2004
Butyl benzyl phthalate	ND	0.41		mg/Kg-dry	1	12/6/2004
Carbazole	ND	0.41		mg/Kg-dry	1	12/6/2004
4-Chloro-3-methylphenol	ND	0.41		mg/Kg-dry	1	12/6/2004
4-Chloroaniline	ND	0.41		mg/Kg-dry	1	12/6/2004
2-Chloronaphthalene	ND	0.41		mg/Kg-dry	1	12/6/2004
2-Chlorophenol	ND	0.41		mg/Kg-dry	1	12/6/2004
4-Chlorophenyl phenyl ether	ND	0.41		mg/Kg-dry	1	12/6/2004
Dibenzofuran	ND	0.41		mg/Kg-dry	1	12/6/2004
1,2-Dichlorobenzene	ND	0.41		mg/Kg-dry	1	12/6/2004
1,3-Dichlorobenzene	ND	0.41		mg/Kg-dry	1	12/6/2004
1,4-Dichlorobenzene	ND	0.41		mg/Kg-dry	1	12/6/2004
3,3'-Dichlorobenzidine	ND	0.82		mg/Kg-dry	1	12/6/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB48-002

Lab Order: 0412018 **Tag Number:** 18-20'

Project: 32088, Willow Street Station- General Iron Collection Date: 11/30/2004 2:45:00 PM

Lab ID: 0412018-006B **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF I	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW:	3550B) Prep	Date: 12/4/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.41	mg/Kg-dry	1	12/6/2004
Diethyl phthalate	ND	0.41	mg/Kg-dry	1	12/6/2004
Dimethyl phthalate	ND	0.41	mg/Kg-dry	1	12/6/2004
Di-n-butyl phthalate	ND	0.41	mg/Kg-dry	1	12/6/2004
2,4-Dimethylphenol	ND	0.41	mg/Kg-dry	1	12/6/2004
4,6-Dinitro-2-methylphenol	ND	2	mg/Kg-dry	1	12/6/2004
2,4-Dinitrophenol	ND	2	mg/Kg-dry	1	12/6/2004
2,4-Dinitrotoluene	ND	0.21	mg/Kg-dry	1	12/6/2004
2,6-Dinitrotoluene	ND	0.21	mg/Kg-dry	1	12/6/2004
Di-n-octyl phthalate	ND	0.41	mg/Kg-dry	1	12/6/2004
Hexachlorobenzene	ND	0.41	mg/Kg-dry	1	12/6/2004
Hexachlorobutadiene	ND	0.41	mg/Kg-dry	1	12/6/2004
Hexachlorocyclopentadiene	ND	0.41	mg/Kg-dry	1	12/6/2004
Hexachloroethane	ND	0.41	mg/Kg-dry	1	12/6/2004
Isophorone	ND	0.41	mg/Kg-dry	1	12/6/2004
2-Methylnaphthalene	1.1	0.41	mg/Kg-dry	1	12/6/2004
2-Methylphenol	ND	0.41	mg/Kg-dry	1	12/6/2004
4-Methylphenol	ND	0.41	mg/Kg-dry	1	12/6/2004
2-Nitroaniline	ND	2	mg/Kg-dry	1	12/6/2004
3-Nitroaniline	ND	2	mg/Kg-dry	1	12/6/2004
4-Nitroaniline	ND	2	mg/Kg-dry	1	12/6/2004
Nitrobenzene	ND	0.21	mg/Kg-dry	1	12/6/2004
2-Nitrophenol	ND	0.41	mg/Kg-dry	1	12/6/2004
4-Nitrophenol	ND	2	mg/Kg-dry	1	12/6/2004
N-Nitrosodi-n-propylamine	ND	0.21	mg/Kg-dry	1	12/6/2004
N-Nitrosodiphenylamine	ND	0.41	mg/Kg-dry	1	12/6/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.41	mg/Kg-dry	1	12/6/2004
Pentachlorophenol	ND	2	mg/Kg-dry	1	12/6/2004
Phenol	ND	0.41	mg/Kg-dry	1	12/6/2004
1,2,4-Trichlorobenzene	ND	0.41	mg/Kg-dry	1	12/6/2004
2,4,5-Trichlorophenol	ND	0.82	mg/Kg-dry	1	12/6/2004
2,4,6-Trichlorophenol	ND	0.41	mg/Kg-dry	1	12/6/2004
Percent Moisture	D2974	1	Prep	Date: 12/2/2004	Analyst: RW
Percent Moisture	20.65	0.01	* wt%	1	12/3/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB49-001

Lab Order: 0412018 Tag Number:

Project: 32088, Willow Street Station- General Iron Collection Date: 11/30/2004 4:00:00 PM

Lab ID: 0412018-007A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF 1	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50	035/8260B	Prep	Date: 12/2/2004	Analyst: PS
Acetone	ND	0.029	mg/Kg-dry	1	12/5/2004
Benzene	ND	0.0059	mg/Kg-dry	1	12/5/2004
Bromodichloromethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
Bromoform	ND	0.0059	mg/Kg-dry	1	12/5/2004
Bromomethane	ND	0.012	mg/Kg-dry	1	12/5/2004
2-Butanone	ND	0.012	mg/Kg-dry	1	12/5/2004
Carbon disulfide	ND	0.0059	mg/Kg-dry	1	12/5/2004
Carbon tetrachloride	ND	0.0059	mg/Kg-dry	1	12/5/2004
Chlorobenzene	ND	0.0059	mg/Kg-dry	1	12/5/2004
Chloroethane	ND	0.012	mg/Kg-dry	1	12/5/2004
Chloroform	ND	0.0059	mg/Kg-dry	1	12/5/2004
Chloromethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
Dibromochloromethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
1,2-Dichloroethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethene	ND	0.0059	mg/Kg-dry	1	12/5/2004
cis-1,2-Dichloroethene	ND	0.0059	mg/Kg-dry	1	12/5/2004
trans-1,2-Dichloroethene	ND	0.0059	mg/Kg-dry	1	12/5/2004
1,2-Dichloropropane	ND	0.0059	mg/Kg-dry	1	12/5/2004
cis-1,3-Dichloropropene	ND	0.0059	mg/Kg-dry	1	12/5/2004
trans-1,3-Dichloropropene	ND	0.0059	mg/Kg-dry	1	12/5/2004
Ethylbenzene	ND	0.0059	mg/Kg-dry	1	12/5/2004
2-Hexanone	ND	0.012	mg/Kg-dry	1	12/5/2004
4-Methyl-2-pentanone	ND	0.012	mg/Kg-dry	1	12/5/2004
Methylene chloride	ND	0.012	mg/Kg-dry	1	12/5/2004
Methyl tert-butyl ether	ND	0.0059	mg/Kg-dry	1	12/5/2004
Styrene	ND	0.0059	mg/Kg-dry	1	12/5/2004
1,1,2,2-Tetrachloroethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
Tetrachloroethene	ND	0.0059	mg/Kg-dry	1	12/5/2004
Toluene	ND	0.0059	mg/Kg-dry	1	12/5/2004
1,1,1-Trichloroethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
1,1,2-Trichloroethane	ND	0.0059	mg/Kg-dry	1	12/5/2004
Trichloroethene	ND	0.0059	mg/Kg-dry	1	12/5/2004
Vinyl chloride	ND	0.0059	mg/Kg-dry	1	12/5/2004
Xylenes, Total	ND	0.012	mg/Kg-dry	1	12/5/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

K - Ki D outside accepted recovery illini

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB49-001

Lab Order: 0412018 Tag Number:

Project: 32088, Willow Street Station- General Iron Collection Date: 11/30/2004 4:00:00 PM

Lab ID: 0412018-007B **Matrix:** Soil

			Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SW	/3580A)	Prep	Date: 12/6/2004	Analyst: JF
TPH (Gasoline)	ND	25	* m	g/Kg-dry	1	12/7/2004
TPH (Diesel)	ND	25	* m	ng/Kg-dry	1	12/7/2004
TPH (Oil)	ND	25	* m	ıg/Kg-dry	1	12/7/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550B)	Prep	Date: 12/4/2004	Analyst: VS
Acenaphthene	0.32	0.032	m	ng/Kg-dry	1	12/6/2004
Acenaphthylene	0.19	0.032	m	g/Kg-dry	1	12/6/2004
Anthracene	0.44	0.32	m	ıg/Kg-dry	10	12/6/2004
Benz(a)anthracene	1	0.32	m	ıg/Kg-dry	10	12/6/2004
Benzo(b)fluoranthene	0.78	0.32	m	ıg/Kg-dry	10	12/6/2004
Benzo(k)fluoranthene	0.74	0.32	m	ıg/Kg-dry	10	12/6/2004
Benzo(g,h,i)perylene	0.68	0.32	m	g/Kg-dry	10	12/6/2004
Benzo(a)pyrene	1	0.32	m	g/Kg-dry	10	12/6/2004
Chrysene	1	0.32	m	ig/Kg-dry	10	12/6/2004
Dibenz(a,h)anthracene	0.11	0.032		ig/Kg-dry	1	12/6/2004
Fluoranthene	1.9	0.32		ig/Kg-dry	10	12/6/2004
Fluorene	0.24	0.032		ig/Kg-dry	1	12/6/2004
Indeno(1,2,3-cd)pyrene	0.55	0.32		ig/Kg-dry	10	12/6/2004
Naphthalene	0.2	0.032		ig/Kg-dry	1	12/6/2004
Phenanthrene	1.3	0.32		g/Kg-dry	10	12/6/2004
Pyrene	2.1	0.32		g/Kg-dry	10	12/6/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	3550B)	Pren	Date: 12/4/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.42	=	ng/Kg-dry	1	12/7/2004
Bis(2-chloroethyl)ether	ND	0.42		g/Kg-dry	1	12/7/2004
Bis(2-ethylhexyl)phthalate	ND	0.42		g/Kg-dry	1	12/7/2004
4-Bromophenyl phenyl ether	ND	0.42		g/Kg-dry	1	12/7/2004
Butyl benzyl phthalate	ND	0.42		g/Kg-dry	1	12/7/2004
Carbazole	ND	0.42		ig/Kg-dry	1	12/7/2004
4-Chloro-3-methylphenol	ND	0.42		ig/Kg-dry	1	12/7/2004
4-Chloroaniline	ND	0.42		ig/Kg-dry	1	12/7/2004
2-Chloronaphthalene	ND	0.42		ig/Kg-dry	1	12/7/2004
2-Chlorophenol	ND	0.42		ig/Kg-dry	1	12/7/2004
4-Chlorophenyl phenyl ether	ND	0.42		ig/Kg-dry	1	12/7/2004
Dibenzofuran	ND	0.42		ig/Kg-dry ig/Kg-dry	1	12/7/2004
1,2-Dichlorobenzene	ND	0.42		ig/Kg-dry ig/Kg-dry	1	12/7/2004
1,3-Dichlorobenzene	ND	0.42		ig/Kg-dry	1	12/7/2004
1,4-Dichlorobenzene	ND	0.42		ig/Kg-dry	1	12/7/2004
3,3´-Dichlorobenzidine	ND	0.42		ig/Kg-dry	1	12/7/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded Page 2

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2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB49-001

Lab Order: 0412018 Tag Number:

Project: 32088, Willow Street Station- General Iron Collection Date: 11/30/2004 4:00:00 PM

Lab ID: 0412018-007B **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF I	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	270C (SW	3550B) Prep	Date: 12/4/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.42	mg/Kg-dry	1	12/7/2004
Diethyl phthalate	ND	0.42	mg/Kg-dry	1	12/7/2004
Dimethyl phthalate	ND	0.42	mg/Kg-dry	1	12/7/2004
Di-n-butyl phthalate	ND	0.42	mg/Kg-dry	1	12/7/2004
2,4-Dimethylphenol	ND	0.42	mg/Kg-dry	1	12/7/2004
4,6-Dinitro-2-methylphenol	ND	2	mg/Kg-dry	1	12/7/2004
2,4-Dinitrophenol	ND	2	mg/Kg-dry	1	12/7/2004
2,4-Dinitrotoluene	ND	0.22	mg/Kg-dry	1	12/7/2004
2,6-Dinitrotoluene	ND	0.22	mg/Kg-dry	1	12/7/2004
Di-n-octyl phthalate	ND	0.42	mg/Kg-dry	1	12/7/2004
Hexachlorobenzene	ND	0.42	mg/Kg-dry	1	12/7/2004
Hexachlorobutadiene	ND	0.42	mg/Kg-dry	1	12/7/2004
Hexachlorocyclopentadiene	ND	0.42	mg/Kg-dry	1	12/7/2004
Hexachloroethane	ND	0.42	mg/Kg-dry	1	12/7/2004
Isophorone	ND	0.42	mg/Kg-dry	1	12/7/2004
2-Methylnaphthalene	ND	0.42	mg/Kg-dry	1	12/7/2004
2-Methylphenol	ND	0.42	mg/Kg-dry	1	12/7/2004
4-Methylphenol	ND	0.42	mg/Kg-dry	1	12/7/2004
2-Nitroaniline	ND	2	mg/Kg-dry	1	12/7/2004
3-Nitroaniline	ND	2	mg/Kg-dry	1	12/7/2004
4-Nitroaniline	ND	2	mg/Kg-dry	1	12/7/2004
Nitrobenzene	ND	0.22	mg/Kg-dry	1	12/7/2004
2-Nitrophenol	ND	0.42	mg/Kg-dry	1	12/7/2004
4-Nitrophenol	ND	2	mg/Kg-dry	1	12/7/2004
N-Nitrosodi-n-propylamine	ND	0.22	mg/Kg-dry	1	12/7/2004
N-Nitrosodiphenylamine	ND	0.42	mg/Kg-dry	1	12/7/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.42	mg/Kg-dry	1	12/7/2004
Pentachlorophenol	ND	2	mg/Kg-dry	1	12/7/2004
Phenol	ND	0.42	mg/Kg-dry	1	12/7/2004
1,2,4-Trichlorobenzene	ND	0.42	mg/Kg-dry	1	12/7/2004
2,4,5-Trichlorophenol	ND	0.84	mg/Kg-dry	1	12/7/2004
2,4,6-Trichlorophenol	ND	0.42	mg/Kg-dry	1	12/7/2004
Percent Moisture	D297	4	Prep	Date: 12/2/2004	Analyst: RW
Percent Moisture	23.18	0.01	* wt%	1	12/3/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

K - KI D outside accepted recovery film

E - Value above quantitation range H - Holding time exceeded

Page 21 of 21

Burns & NcDonnell Since 1898		, å	Request for Chemic	Chemic	al Analy	al Analysis and Chain of Custody Record	hain of	Custody	Recor	D				
Burns & McDonnell Engineering 2601 W. 22nd St		Laboratory:	1	STAT		s (latomor)	<u>م</u> م		Docur Lab.	Document Control No. VISS - OX. Lab. Reference No. or Episode No.:	"\\55-002 r Episode No.: (04120	28	
Oak Brook, Illinois 60523 Phone: (630) 990-0300 Fax: (630) 990-0301	0) 990-0301	City/Stat	ZiZ	i Caq	7/0		37			Code	P/S (C)			
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Sample Receipt Checklist

Client Name B&M		Date and Time Received:	12/1/2004
Work Order Numbe 0412018		Received by: CDF	
Checklist completed by: Signature Date	21,104	Reviewed by: Initials	12/10/04 Date
Matrix: Carrier name	STAT Analysis		
Shipping container/cooler in good condition?	Yes 🗸	No Not Present	
Custody seals intact on shippping container/cooler?	Yes 🗸	No Not Present	
Custody seals intact on sample bottles?	Yes	No ☐ Not Present ✓	
Chain of custody present?	Yes 🗸	No 🗌	
Chain of custody signed when relinquished and received?	Yes 🗸	No 🗌	
Chain of custody agrees with sample labels?	Yes 🗸	No 🗔	
Samples in proper container/bottle?	Yes 🗹	No 🗆	
Sample containers intact?	Yes 🗸	No 🗌	
Sufficient sample volume for indicated test?	Yes 🗌	No 🗹	
All samples received within holding time?	Yes 🗸	No 🗌	
Container or Temp Blank temperature in compliance?	Yes 🗸	No Temperature	e 5 °C
Water - VOA vials have zero headspace? No VOA vials sub	mitted	Yes 🗹 No 🗌	
Water - Samples properly preserved/ pH checked?	Yes	No 🗵	
Adjusted?	Che	cked by	
Any No and/or NA (not applicable) response must be detailed in the	comments section	below.	
Client contacted B+M Date contacted:	nlzlæf	Person contacted	MY
Contacted by: Regarding:			
comments: Sample WSS-SB	49-00	2 contained	an empty
402 jar			`
Corrective Action WILL RF - SAMPLE			

CLIENT: Burns & McDonnell

Work Order: 0412018

Project: 32088, Willow Street Station- General Iron

Test No: SW5035/8260B Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Date: 15-Dec-04

Sample ID	BR4FBZ	BZMED8	DBFM	DCA12D4	
VBLK120504a-3	93.3	101	97.4	106	
VLCS120504a-3	103	104	105	102	
VLCSD120504a-3	99.9	103	98.3	101	
0412018-001A	92.6	99.2	96.0	110	
0412018-002A	91.4	100	91.3	106	
0412018-003A	93.3	100	92.5	106	
0412018-004A	92.7	98.0	91.8	100	
0412018-005A	95.5	98.8	91.3	106	
0412018-006A	92.0	97.7	88.5	107	
0412018-007A	95.2	99.4	91.7	99.5	

Acronym		Surrogate	QC Limits
BR4FBZ	=	4-Bromofluorobenzene	63-110
BZMED8	=	Toluene-d8	85-110
DBFM	=	Dibromofluoromethane	83-119
DCA12D4	=	1,2-Dichloroethane-d4	84-129

^{*} Surrogate recovery outside acceptance limits

CLIENT: Burns & McDonnell

Work Order: 0412018

Project: 32088, Willow Street Station- General Iron

Test No: SW8270C Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Date: 15-Dec-04

Sample ID	CLPH2D4	DCBZ12D4	NO2BZD5	PH246BR	PH2F	PHD5	PHEN2F	PHEND14
MB-12089-SVOC	73.1	67.0	81.0	82.4	75.3	84.4	69.8	81.7
LCS-12089-SVOC	74.3	69.0	83.7	75.0	78.0	86.6	71.9	80.2
0412056-006BMS	78.2	76.4	91.6	75.6	78.0	86.1	77.8	85.2
0412056-006BMSD	76.8	73.5	89.9	85.0	74.8	84.9	81.2	93.0
0412018-002B	80.6	77.4	97.8	77.3	82.4	94.7	85.0	104
0412018-006B	67.5	66.3	81.9	41.2	67.8	80.9	74.9	96.5
0412018-004B	66.9	65.3	81.0	42.0	68.2	82.9	73.1	96.7
0412018-007B	72.2	70.6	89.5	47.8	73.7	88.7	82.5	82.1
0412018-005B	70.8	63.7	82.3	81.1	66.1	81.2	75.8	78.9
0412018-001B	73.4	65.5	85.8	94.4	68.4	84.7	80.7	74.9
0412018-003B	79.7	75.2	94.0	92.5	74.4	90.2	86.9	89.6

	Surrogate		QC Limits	-
= =	1,2-Dichloro Nitrobenzen	benzene-d4 e-d5	20-130 20-130 23-120	
=	2,4,6-Tribron	nophenol	19-122	
=	2-Fluorophei	nol	25-121	
=	Phenol-d5		24-113	
=	2-Fluorobiph	enyl	30-115	
=	4-Terphenyl-	-d14	18-137	
	= - - - - -	= 2-Chlorophe = 1,2-Dichlorol = Nitrobenzen = 2,4,6-Tribron = 2-Fluorophei = Phenol-d5 = 2-Fluorobiph	= 2-Chlorophenol-d4 = 1,2-Dichlorobenzene-d4 = Nitrobenzene-d5 = 2,4,6-Tribromophenol = 2-Fluorophenol	= 2-Chlorophenol-d4 20-130 = 1,2-Dichlorobenzene-d4 20-130 = Nitrobenzene-d5 23-120 = 2,4,6-Tribromophenol 19-122 = 2-Fluorophenol 25-121 = Phenol-d5 24-113 = 2-Fluorobiphenyl 30-115

^{*} Surrogate recovery outside acceptance limits

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 12/4/2004 9:15:43 A
Prep End Date: 12/4/2004 3:02:26 P

Prep Factor Units:

Prep Batch 12089 Prep Code: 3550_SVOC Technician: JT mL/Kg

Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0412018-001B	Soil		0.03011	0	0	1	33.212	12/4/2004	12/4/2004
0412018-002B	Soil		0.03062	0	0	1	32.658	12/4/2004	12/4/2004
0412018-003B	Soil		0.03061	0	0	1	32.669	12/4/2004	12/4/2004
0412018-004B	Soil		0.03069	0	0	1	32.584	12/4/2004	12/4/2004
0412018-005B	Soil		0.03029	0	0	1	33.014	12/4/2004	12/4/2004
0412018-006B	Soil		0.03043	0	0	1	32.862	12/4/2004	12/4/2004
0412018-007B	Soil		0.03062	0	0	1	32.658	12/4/2004	12/4/2004
0412027-001B	Soil		0.03084	0	0	1	32.425	12/4/2004	12/4/2004
0412027-002B	Soil		0.03055	0	0	1	32.733	12/4/2004	12/4/2004
0412027-003B	Soil		0.03036	0	0	1	32.938	12/4/2004	12/4/2004
0412027-004B	Soil		0.03037	0	0	1	32.927	12/4/2004	12/4/2004
0412056-001B	Soil		0.03074	0	0	1	32.531	12/4/2004	12/4/2004
0412056-002B	Soil		0.03081	0	0	1	32.457	12/4/2004	12/4/2004
0412056-003B	Soil		0.03026	0	0	1	33.047	12/4/2004	12/4/2004
0412056-005B	Soil		0.03028	0	0	1	33.025	12/4/2004	12/4/2004
0412056-006B	Soil		0.03052	0	0	1	32.765	12/4/2004	12/4/2004
0412056-006BMS	Soil		0.03069	0	0	1	32.584	12/4/2004	12/4/2004
0412056-006BMSD	Soil		0.03058	0	0	1	32.701	12/4/2004	12/4/2004
0412056-007B	Soil		0.03021	0	0	1	33.102	12/4/2004	12/4/2004
0412056-008B	Soil		0.03052	0	0	1	32.765	12/4/2004	12/4/2004
LCS-12089-SVOC			0.03	0	0	1	33.333	12/4/2004	12/4/2004
MB-12089-SVOC			0.03	0	0	1	33.333	12/4/2004	12/4/2004

CLIENT: Burns & McDonnell

Work Order: 0412018

Project: 32088, Willow Street Station- General Iron

Test No: SW8270C-SIM Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Date: 15-Dec-04

Sample ID	DCBZ12D4	NO2BZD5	PHEN2F	PHEND14	
MB-12088-PNA	71.3	79.8	79.2	88.8	
LCS-12088-PNA	66.1	80.2	75.8	94.6	
0412056-003BMS	70.3	86.4	80.2	96.8	
0412056-003BMSD	70.5	90.0	85.0	101	
0412018-003B	63.3	81.8	59.7	70.0	
0412018-007B	71.0	88.5	63.0	69.7	
0412018-001B	53.0	70.8	52.5	68.2	
0412018-005B	61.3	77.3	58.9	71.4	
0412018-006B	64.2	78.9	57.1	52.7	
0412018-004B	67.1	80.8	51.0	51.1	
0412018-002B	69.4	80.4	54.8	62.4	

Acronym	Surrogate	QC Limits
DCBZ12D4	= 1,2-Dichlorobenzene-d4	20-130
NO2BZD5	= Nitrobenzene-d5	23-120
PHEN2F	= 2-Fluorobiphenyl	30-115
PHEND14	= 4-Terphenyl-d14	18-137

^{*} Surrogate recovery outside acceptance limits

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 12/4/2004 9:10:34 A
Prep End Date: 12/4/2004 3:02:32 P

Prep Factor Units:

Prep Batch 12088 Prep Code: 3550_PNA Technician: JT mL/Kg

Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0412018-001B	Soil		0.03011	0	0	1	33.212	12/4/2004	12/4/2004
0412018-002B	Soil		0.03062	0	0	1	32.658	12/4/2004	12/4/2004
0412018-003B	Soil		0.03061	0	0	1	32.669	12/4/2004	12/4/2004
0412018-004B	Soil		0.03069	0	0	1	32.584	12/4/2004	12/4/2004
0412018-005B	Soil		0.03029	0	0	1	33.014	12/4/2004	12/4/2004
0412018-006B	Soil		0.03043	0	0	1	32.862	12/4/2004	12/4/2004
0412018-007B	Soil		0.03062	0	0	1	32.658	12/4/2004	12/4/2004
0412027-001B	Soil		0.03084	0	0	1	32.425	12/4/2004	12/4/2004
0412027-002B	Soil		0.03055	0	0	1	32.733	12/4/2004	12/4/2004
0412027-003B	Soil		0.03036	0	0	1	32.938	12/4/2004	12/4/2004
0412027-004B	Soil		0.03037	0	0	1	32.927	12/4/2004	12/4/2004
0412056-001B	Soil		0.03074	0	0	1	32.531	12/4/2004	12/4/2004
0412056-002B	Soil		0.03081	0	0	1	32.457	12/4/2004	12/4/2004
0412056-003B	Soil		0.03026	0	0	1	33.047	12/4/2004	12/4/2004
0412056-003BMS	Soil		0.03058	0	0	1	32.701	12/4/2004	12/4/2004
0412056-003BMSD	Soil		0.0303	0	0	1	33.003	12/4/2004	12/4/2004
0412056-005B	Soil		0.03028	0	0	1	33.025	12/4/2004	12/4/2004
0412056-006B	Soil		0.03052	0	0	1	32.765	12/4/2004	12/4/2004
0412056-007B	Soil		0.03021	0	0	1	33.102	12/4/2004	12/4/2004
0412056-008B	Soil		0.03052	0	0	1	32.765	12/4/2004	12/4/2004
LCS-12088-PNA			0.03	0	0	1	33.333	12/4/2004	12/4/2004
MB-12088-PNA			0.03	0	0	1	33.333	12/4/2004	12/4/2004

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 12/6/2004 8:47:59 P

Prep End Date:

Prep Factor Units:

Prep Batch 12118 Prep Code: 3580_TPH Technician: CDC mL/Kg

T Tep Bateri 12116	i icp c	,00e. 3300 _1	1111	Chilician. CDC					
Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0412018-001B	Soil		0.00513	0	0	5	974.659	12/6/2004	12/7/2004
0412018-002B	Soil		0.00515	0	0	5	970.874	12/6/2004	12/7/2004
0412018-002BMS	Soil		0.00521	0	0	5	959.693	12/6/2004	12/7/2004
0412018-002BMSD	Soil		0.00503	0	0	5	994.036	12/6/2004	12/7/2004
0412018-003B	Soil		0.00523	0	0	5	956.023	12/6/2004	12/7/2004
0412018-004B	Soil		0.00545	0	0	5	917.431	12/6/2004	12/7/2004
0412018-005B	Soil		0.00539	0	0	5	927.644	12/6/2004	12/7/2004
0412018-006B	Soil		0.00518	0	0	5	965.251	12/6/2004	12/7/2004
0412018-007B	Soil		0.00522	0	0	5	957.854	12/6/2004	12/7/2004
0412027-001B	Soil		0.00519	0	0	5	963.391	12/6/2004	12/7/2004
0412027-002B	Soil		0.00513	0	0	5	974.659	12/6/2004	12/7/2004
0412027-003B	Soil		0.00511	0	0	5	978.474	12/6/2004	12/7/2004
0412027-004B	Soil		0.00504	0	0	5	992.063	12/6/2004	12/7/2004
0412102-006B	Soil		0.00525	0	0	5	952.381	12/7/2004	12/8/2004
0412102-024B	Soil		0.00506	0	0	5	988.142	12/7/2004	12/8/2004
0412102-026B	Soil		0.00514	0	0	5	972.763	12/7/2004	12/8/2004
0412134-001A	Soil		0.0054	0	0	5	925.926	12/6/2004	12/7/2004
0412138-001B	Soil		0.00534	0	0	5	936.330	12/7/2004	12/8/2004
LCS-12118-TPH			0.005	0	0	5	1000.000	12/6/2004	12/7/2004
MB-12118-TPH			0.005	0	0	5	1000.000	12/6/2004	12/7/2004

Date: *December 15, 2004*

CLIENT: Burns & McDonnell

Work Order: 0412018

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12118

Sample ID MB-12118-TPH	CompTypo	MDLV	TestCod	lo. TDU	Units: mq/Kq		Dran Data	. 40/6/00	204	Dum ID. C	C-FID 04120	7.4
'	SampType:				5 5		Prep Date				_	7A
Client ID: ZZZZZ	Batch ID:	12118	TestN	lo: SW8015N	l		Analysis Date	e: 12/7/20)04	SeqNo: 31	19478	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit I	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		ND	20									*
TPH (Diesel)		ND	20									*
TPH (Oil)		ND	20									*
Sample ID LCS-12118-TPH	SampType:	LCS	TestCoo	le: TPH	Units: mg/Kg		Prep Date	: 12/6/20	004	Run ID: G	C-FID_04120	7A
Client ID: ZZZZZ	Batch ID:	12118	TestN	o: SW8015N	1		Analysis Date	e: 12/7/2 0	004	SeqNo: 31	19479	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		178.4	20	200	0	89.2	30	150	0	0		*
TPH (Diesel)		244.7	20	200	0	122	30	150	0	0		*
TPH (Oil)		287.6	20	200	0	144	30	150	0	0		*
Sample ID 0412018-002BMS	SampType:	MS	TestCoo	le: TPH	Units: mg/Kg	-dry	Prep Date	: 12/6/20	004	Run ID: G	C-FID_04120	7A
Client ID: WSS-SB57-002	Batch ID:	12118	TestN	o: SW8015N	1		Analysis Date	e: 12/8/2 0	004	SeqNo: 31	19491	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		254.4	23	350.4	5.641	71	30	150	0	0		*
TPH (Diesel)		379.4	23	350.4	4.202	107	30	150	0	0		*
TPH (Oil)		464.9	23	350.4	16.57	128	30	150	0	0		*
Sample ID 0412018-002BMSD	SampType:	MSD	TestCod	le: TPH	Units: mg/Kg	-dry	Prep Date	: 12/6/20	004	Run ID: G	C-FID_04120	7A
Client ID: WCC CRET 002	Batch ID:	10110	TestN	o: SW8015N	1		Analysis Date	e: 12/8/2 0	004	SeqNo: 31	19492	
Client ID: WSS-SB57-002	Dalch ID.	12110	10001									
Analyte	Balcii iD.	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
	Balch ID.				SPK Ref Val	%REC 66.6	LowLimit	HighLimit	RPD Ref Val	%RPD 2.76		Qual *
Analyte	Balcii ID.	Result	PQL	SPK value							25	Qual * *

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Page 1 of 13

CLIENT: Burns & McDonnell

Work Order: 0412018

ANALYTICAL QC SUMMARY REPORT

Project: 32088, Willow Street Station- General Iron BatchID: 12088

Client ID: ZZZZZ	Sample ID MB-12088-PNA	SampType: MBLK	TestCode: PNA_SC	OIL Units: mg/Kg		Prep Date:	12/4/20	004	Run ID: SV	OC-3_0412	05A
ND	Client ID: ZZZZZ	Batch ID: 12088	TestNo: SW8270	C-SI		Analysis Date:	12/5/20	004	SeqNo: 31	7931	
Accomplith Parish	Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit Hi	ighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracere ND 0.025 Benz(a)purele ND 0.025 Benz(b)fluoranthene ND 0.025 Benz(b)fluoranthene ND 0.025 Benz(b)fluoranthene ND 0.025 Benz(b)fluoranthene ND 0.025 Benz(b)fluoranthene ND 0.025 Benz(b)fluoranthene ND 0.025 Benz(b)fluoranthene ND 0.025 Chrysene ND 0.025 Chrysene ND 0.025 Fluoranthene ND 0.025 Flu	Acenaphthene	ND	0.025								
Benz(a)antinacene ND 0.025	Acenaphthylene	ND	0.025								
Benzo(a) pyre	Anthracene	ND	0.025								
Benzo(b)	Benz(a)anthracene	ND	0.025								
Benzo(g,h.i)perylene ND 0.025	Benzo(a)pyrene	ND	0.025								
Benzo(k)fluoranthene	Benzo(b)fluoranthene	ND	0.025								
Chrysene	Benzo(g,h,i)perylene	ND	0.025								
Dibenz(a,h)anthracene ND 0.025 Fluoranthene ND 0.025 ND 0.025 Indeno(1,2,3-cd))yrene ND 0.025 ND	Benzo(k)fluoranthene	ND	0.025								
Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene ND 0.025 Fluoranthene Result PQL SPK value SPK Ref Val R	Chrysene	ND	0.025								
Fluorene	Dibenz(a,h)anthracene	ND	0.025								
ND	Fluoranthene	ND	0.025								
Naphthalene	Fluorene	ND	0.025								
Phenanthree ND 0.025 ND 0.025 ND 0.025 ND 0.025 ND 0.025 ND 0.025 ND 0.025 ND 0.025 ND 0.025 ND 0.025 ND 0.025 ND 0.025 ND 0.025 ND ND 0.025 ND ND 0.025 ND ND ND ND ND ND ND N	Indeno(1,2,3-cd)pyrene	ND	0.025								
Sample ID LCS-12088-PNA SampType: LCS TestCode: PNA_SOIL Units: mg/Kg Prep Date: 12/4/20 Run ID: SpC-3_041205A Seqnicial PQL SpK value	Naphthalene	ND	0.025								
Sample ID LCS-12088-PNA SampType: LCS TestCode: PNA_SOIL Units: mg/kg Prep Date: 12/4/2∪√ Run ID: SVOC-3_0412∪5A Client ID: ZZZZZ Batch ID: 12088 TestN·: SW8270C-SI Analysis Date: 12/5/2∪√ SeqNo: 317932 Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD PPD Limit Qual Acenaphthylene 0.1157 0.025 0.167 0 69.3 30 130 0 0 0 Acenaphthylene 0.1163 0.025 0.167 0 69.7 30 130 0 0 0 Acenaphthylene 0.1237 0.025 0.167 0 74.1 30 130 0 </td <td>Phenanthrene</td> <td>ND</td> <td>0.025</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Phenanthrene	ND	0.025								
Client ID: ZZZZZZ Batch ID: 12088 TestN: SW8270C-SI Analysis Date: 12/5/204* SeqNo: 317932 Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual Acenaphthene 0.1157 0.025 0.167 0 69.3 30 130 0 0 0 Acenaphthylene 0.1163 0.025 0.167 0 69.7 30 130 0 0 0 Anthracene 0.1237 0.025 0.167 0 74.1 30 130 0 0 0 Benz(a)anthracene 0.1427 0.025 0.167 0 85.4 30 130 0 0 0 Benzo(a)pyrene 0.1447 0.025 0.167 0 86.6 30 130 0 0 0 Benzo(g,h,i)perylene 0.1517 0.025 0.167 0 <td< td=""><td>Pyrene</td><td>ND</td><td>0.025</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Pyrene	ND	0.025								
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual Acenaphthene 0.1157 0.025 0.167 0 69.3 30 130 0 0 Acenaphthylene 0.1163 0.025 0.167 0 69.7 30 130 0 0 Anthracene 0.1237 0.025 0.167 0 85.4 30 130 0 0 Benz(a)anthracene 0.1427 0.025 0.167 0 85.4 30 130 0 0 Benzo(a)pyrene 0.1447 0.025 0.167 0 86.6 30 130 0 0 Benzo(b)fluoranthene 0.1613 0.025 0.167 0 96.6 30 130 0 0 Benzo(k)fluoranthene 0.132 0.025 0.167 0 79 30 130 0 0 Chrysene 0.	Sample ID LCS-12088-PNA	SampType: LCS	TestCode: PNA_SC	IL Units: mg/Kg		Prep Date:	12/4/20	004	Run ID: SV	OC-3_0412	05A
Acenaphthene 0.1157 0.025 0.167 0 69.3 30 130 0 0 Acenaphthylene 0.1163 0.025 0.167 0 69.7 30 130 0 0 Anthracene 0.1237 0.025 0.167 0 74.1 30 130 0 0 Benz(a)anthracene 0.1427 0.025 0.167 0 85.4 30 130 0 0 Benzo(a)pyrene 0.1447 0.025 0.167 0 86.6 30 130 0 0 Benzo(b)fluoranthene 0.1613 0.025 0.167 0 96.6 30 130 0 0 Benzo(g,h,i)perylene 0.1517 0.025 0.167 0 90.8 30 130 0 0 Benzo(k)fluoranthene 0.132 0.025 0.167 0 79 30 130 0 0 Chrysene 0.138 0.025 0.167	Client ID: ZZZZZ	Batch ID: 12088	TestNo: SW8270	C-SI		Analysis Date:	12/5/20	004	SeqNo: 31	7932	
Acenaphthylene 0.1163 0.025 0.167 0 69.7 30 130 0 0 Anthracene 0.1237 0.025 0.167 0 74.1 30 130 0 0 Benz(a)anthracene 0.1427 0.025 0.167 0 85.4 30 130 0 0 Benzo(a)pyrene 0.1447 0.025 0.167 0 86.6 30 130 0 0 Benzo(b)fluoranthene 0.1613 0.025 0.167 0 96.6 30 130 0 0 Benzo(g,h,i)perylene 0.1517 0.025 0.167 0 90.8 30 130 0 0 Benzo(k)fluoranthene 0.132 0.025 0.167 0 79 30 130 0 0 Chrysene 0.138 0.025 0.167 0 82.6 30 130 0 0	Analyte	Result	PQL SPK value	SPK Ref Val	%REC	LowLimit Hi	ighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene 0.1237 0.025 0.167 0 74.1 30 130 0 0 Benz(a)anthracene 0.1427 0.025 0.167 0 85.4 30 130 0 0 Benzo(a)pyrene 0.1447 0.025 0.167 0 86.6 30 130 0 0 Benzo(b)fluoranthene 0.1613 0.025 0.167 0 96.6 30 130 0 0 Benzo(g,h,i)perylene 0.1517 0.025 0.167 0 90.8 30 130 0 0 Benzo(k)fluoranthene 0.132 0.025 0.167 0 79 30 130 0 0 Chrysene 0.138 0.025 0.167 0 82.6 30 130 0 0	Acenaphthene	0.1157	0.025 0.167	0	69.3	30	130	0	0		
Benz(a)anthracene 0.1427 0.025 0.167 0 85.4 30 130 0 0 Benzo(a)pyrene 0.1447 0.025 0.167 0 86.6 30 130 0 0 Benzo(b)fluoranthene 0.1613 0.025 0.167 0 96.6 30 130 0 0 Benzo(g,h,i)perylene 0.1517 0.025 0.167 0 90.8 30 130 0 0 Benzo(k)fluoranthene 0.132 0.025 0.167 0 79 30 130 0 0 Chrysene 0.138 0.025 0.167 0 82.6 30 130 0 0	Acenaphthylene	0.1163	0.025 0.167	0	69.7	30	130	0	0		
Benzo(a)pyrene 0.1447 0.025 0.167 0 86.6 30 130 0 0 Benzo(b)fluoranthene 0.1613 0.025 0.167 0 96.6 30 130 0 0 Benzo(g,h,i)perylene 0.1517 0.025 0.167 0 90.8 30 130 0 0 Benzo(k)fluoranthene 0.132 0.025 0.167 0 79 30 130 0 0 Chrysene 0.138 0.025 0.167 0 82.6 30 130 0 0	Anthracene	0.1237	0.025 0.167	0	74.1	30	130	0	0		
Benzo(b)fluoranthene 0.1613 0.025 0.167 0 96.6 30 130 0 0 Benzo(g,h,i)perylene 0.1517 0.025 0.167 0 90.8 30 130 0 0 Benzo(k)fluoranthene 0.132 0.025 0.167 0 79 30 130 0 0 Chrysene 0.138 0.025 0.167 0 82.6 30 130 0 0	Benz(a)anthracene	0.1427	0.025 0.167	0	85.4	30	130	0	0		
Benzo(g,h,i)perylene 0.1517 0.025 0.167 0 90.8 30 130 0 0 Benzo(k)fluoranthene 0.132 0.025 0.167 0 79 30 130 0 0 Chrysene 0.138 0.025 0.167 0 82.6 30 130 0 0	Benzo(a)pyrene	0.1447	0.025 0.167	0	86.6	30	130	0	0		
Benzo(k)fluoranthene 0.132 0.025 0.167 0 79 30 130 0 0 Chrysene 0.138 0.025 0.167 0 82.6 30 130 0 0	Benzo(b)fluoranthene	0.1613	0.025 0.167	0	96.6	30	130	0	0		
Chrysene 0.138 0.025 0.167 0 82.6 30 130 0 0	Benzo(g,h,i)perylene	0.1517	0.025 0.167	0	90.8	30	130	0	0		
	Benzo(k)fluoranthene	0.132	0.025 0.167	0	79	30	130	0	0		
Dibenz(a,h)anthracene 0.1547 0.025 0.167 0 92.6 30 130 0 0	Chrysene	0.138	0.025 0.167	0	82.6	30	130	0	0		
	Dibenz(a,h)anthracene	0.1547	0.025 0.167	0	92.6	30	130	0	0		

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

CLIENT: Burns & McDonnell

Work Order:

Project:

0412018

32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12088

Sample ID LCS-12088-PNA	SampType:	LCS	TestCode	e: PNA_SOIL	Units: mg/Kg		Prep Date	e: 12/4/20	004	Run ID: SV	OC-3_0412	05A
Client ID: ZZZZZ	Batch ID:	12088	TestNo	: SW8270C	-SI		Analysis Date	e: 12/5/2 0	004	SeqNo: 31	7932	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoranthene		0.1387	0.025	0.167	0	83	30	130	0	0		
Fluorene		0.1283	0.025	0.167	0	76.8	30	130	0	0		
Indeno(1,2,3-cd)pyrene		0.152	0.025	0.167	0	91	30	130	0	0		
Naphthalene		0.1073	0.025	0.167	0	64.3	30	130	0	0		
Phenanthrene		0.1263	0.025	0.167	0	75.6	30	130	0	0		
Pyrene		0.1337	0.025	0.167	0	80	30	130	0	0		
Sample ID 0412056-003BMS	SampType:	MS	TestCode	e: PNA_SOIL	_ Units: mg/Kg	-dry	Prep Date	e: 12/4/2 0	004	Run ID: SV	OC-3_0412	06A
Client ID: ZZZZZ	Batch ID:	12088	TestNo	: SW8270C	-SI		Analysis Date	e: 12/6/2 0	004	SeqNo: 31	8718	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene		0.1521	0.030	0.2032	0	74.9	30	130	0	0		
Acenaphthylene		0.1546	0.030	0.2032	0	76	30	130	0	0		
Anthracene		0.1582	0.030	0.2032	0	77.8	30	130	0	0		
Benz(a)anthracene		0.1846	0.030	0.2032	0	90.8	30	130	0	0		
Benzo(a)pyrene		0.1911	0.030	0.2032	0	94	30	130	0	0		
Benzo(b)fluoranthene		0.1907	0.030	0.2032	0	93.8	30	130	0	0		
Benzo(g,h,i)perylene		0.202	0.030	0.2032	0	99.4	30	130	0	0		
Benzo(k)fluoranthene		0.1911	0.030	0.2032	0	94	30	130	0	0		
Chrysene		0.1801	0.030	0.2032	0	88.6	30	130	0	0		
Dibenz(a,h)anthracene		0.2049	0.030	0.2032	0	101	30	130	0	0		
Fluoranthene		0.1834	0.030	0.2032	0.01394	83.4	30	130	0	0		
Fluorene		0.1675	0.030	0.2032	0	82.4	30	130	0	0		
Indeno(1,2,3-cd)pyrene		0.2016	0.030	0.2032	0	99.2	30	130	0	0		
Naphthalene		0.1412	0.030	0.2032	0	69.5	30	130	0	0		
Phenanthrene		0.1675	0.030	0.2032	0.01927	73	30	130	0	0		
Pyrene		0.1761	0.030	0.2032	0.01066	81.4	30	130	0	0		

Qualifiers:

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^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

CLIENT: Burns & McDonnell

Work Order: 0412018

32088, Willow Street Station-General Iron **Project:**

ANALYTICAL QC SUMMARY REPORT

BatchID: 12088

Sample ID 0412056-003BMSD	SampType: MSD	TestCod	de: PNA_SOII	Units: mg/l	Kg-dry	Prep Da	te: 12/4/2 0	004	Run ID: SV	OC-3_04120	6A
Client ID: ZZZZZ	Batch ID: 12088	TestN	lo: SW8270C	-SI		Analysis Da	te: 12/6/2 0	004	SeqNo: 31	8719	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.1642	0.031	0.2051	0	80	30	130	0.1521	7.62	50	
Acenaphthylene	0.1646	0.031	0.2051	0	80.2	30	130	0.1546	6.28	50	
Anthracene	0.172	0.031	0.2051	0	83.8	30	130	0.1582	8.33	50	
Benz(a)anthracene	0.1871	0.031	0.2051	0	91.2	30	130	0.1846	1.36	50	
Benzo(a)pyrene	0.1904	0.031	0.2051	0	92.8	30	130	0.1911	0.362	50	
Benzo(b)fluoranthene	0.1928	0.031	0.2051	0	94	30	130	0.1907	1.13	50	
Benzo(g,h,i)perylene	0.2047	0.031	0.2051	0	99.8	30	130	0.202	1.32	50	
Benzo(k)fluoranthene	0.1924	0.031	0.2051	0	93.8	30	130	0.1911	0.707	50	
Chrysene	0.1822	0.031	0.2051	0	88.8	30	130	0.1801	1.14	50	
Dibenz(a,h)anthracene	0.2084	0.031	0.2051	0	102	30	130	0.2049	1.71	50	
Fluoranthene	0.1908	0.031	0.2051	0.01394	86.2	30	130	0.1834	3.97	50	
Fluorene	0.1838	0.031	0.2051	0	89.6	30	130	0.1675	9.27	50	
Indeno(1,2,3-cd)pyrene	0.2051	0.031	0.2051	0	100	30	130	0.2016	1.72	50	
Naphthalene	0.147	0.031	0.2051	0	71.7	30	130	0.1412	4.03	50	
Phenanthrene	0.1789	0.031	0.2051	0.01927	77.8	30	130	0.1675	6.57	50	
Pyrene	0.181	0.031	0.2051	0.01066	83	30	130	0.1761	2.75	50	

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^{* -} Non Accredited Parameter

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R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

CLIENT: Burns & McDonnell

Work Order: 0412018

Project:

ANALYTICAL QC SUMMARY REPORT

32088, Willow Street Station- General Iron

BatchID: 12089

Sample ID MB-12089-SVOC	SampType: MBLK	TestCode: SVOC_SOIL Units: mg/Kg	Prep Date: 12/4/2004	Run ID: SVOC-2_041205A
Client ID: ZZZZZ	Batch ID: 12089	TestNo: SW8270C	Analysis Date: 12/5/2004	SeqNo: 318036
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
1,2,4-Trichlorobenzene	ND	0.17		
1,2-Dichlorobenzene	ND	0.17		
1,3-Dichlorobenzene	ND	0.17		
1,4-Dichlorobenzene	ND	0.17		
2, 2'-oxybis(1-Chloropropane)	ND	0.17		
2,4,5-Trichlorophenol	ND	0.33		
2,4,6-Trichlorophenol	ND	0.17		
2,4-Dichlorophenol	ND	0.17		
2,4-Dimethylphenol	ND	0.17		
2,4-Dinitrophenol	ND	0.80		
2,4-Dinitrotoluene	ND	0.17		
2,6-Dinitrotoluene	ND	0.17		
2-Chloronaphthalene	ND	0.17		
2-Chlorophenol	ND	0.17		
2-Methylnaphthalene	ND	0.17		
2-Methylphenol	ND	0.17		
2-Nitroaniline	ND	0.80		
2-Nitrophenol	ND	0.17		
3,3´-Dichlorobenzidine	ND	0.33		
3-Nitroaniline	ND	0.80		
4,6-Dinitro-2-methylphenol	ND	0.80		
4-Bromophenyl phenyl ether	ND	0.17		
4-Chloro-3-methylphenol	ND	0.17		
4-Chloroaniline	ND	0.17		
4-Chlorophenyl phenyl ether	ND	0.17		
4-Methylphenol	ND	0.17		
4-Nitroaniline	ND	0.80		
4-Nitrophenol	ND	0.80		
Acenaphthene	ND	0.17		
Acenaphthylene	ND	0.17		
Aniline	ND	0.17		

Qualifiers:

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Work Order: 0412018

ANALYTICAL QC SUMMARY REPORT

Project: 32088, Willow Street Station- General Iron BatchID: 12089

Sample ID MB-12089-SVOC	SampType: MBLK	TestCode: SVOC_SOIL Units: mg/Kg	Prep Date: 12/4/2004	Run ID: SVOC-2_041205A
Client ID: ZZZZZ	Batch ID: 12089	TestNo: SW8270C	Analysis Date: 12/5/2004	SeqNo: 318036
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Anthracene	ND	0.17		
Benz(a)anthracene	ND	0.17		
Benzidine	ND	0.17		
Benzo(a)pyrene	ND	0.17		
Benzo(b)fluoranthene	ND	0.17		
Benzo(g,h,i)perylene	ND	0.17		
Benzo(k)fluoranthene	ND	0.17		
Benzoic acid	ND	0.80		
Benzyl alcohol	ND	0.17		
Bis(2-chloroethoxy)methane	ND	0.17		
Bis(2-chloroethyl)ether	ND	0.17		
Bis(2-ethylhexyl)phthalate	ND	0.17		
Butyl benzyl phthalate	ND	0.17		
Carbazole	ND	0.17		
Chrysene	ND	0.17		
Di-n-butyl phthalate	ND	0.17		
Di-n-octyl phthalate	ND	0.17		
Dibenz(a,h)anthracene	ND	0.17		
Dibenzofuran	ND	0.17		
Diethyl phthalate	ND	0.17		
Dimethyl phthalate	ND	0.17		
Fluoranthene	ND	0.17		
Fluorene	ND	0.17		
Hexachlorobenzene	ND	0.17		
Hexachlorobutadiene	ND	0.17		
Hexachlorocyclopentadiene	ND	0.17		
Hexachloroethane	ND	0.17		
Indeno(1,2,3-cd)pyrene	ND	0.17		
Isophorone	ND	0.17		
N-Nitrosodi-n-propylamine	ND	0.17		
N-Nitrosodimethylamine	ND	0.17		

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Work Order:

Project:

0412018

32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12089

Sample ID MB-12089-SVOC Client ID: ZZZZZ	SampType: MBLK Batch ID: 12089		de: SVOC_SC	IL Units: mg/Kg		Prep Da Analysis Da	te: 12/4/2 ate: 12/5/2		Run ID: SV SeqNo: 31	OC-2_0412 8036	05A
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
N-Nitrosodiphenylamine	ND	0.17									
Naphthalene	ND	0.17									
Nitrobenzene	ND	0.17									
Pentachlorophenol	ND	0.80									
Phenanthrene	ND	0.17									
Phenol	ND	0.17									
Pyrene	ND	0.17									
Pyridine	ND	0.17									
Sample ID LCS-12089-SVOC	SampType: LCS	TestCod	le: SVOC_SC	IL Units: mg/Kg		Prep Da	te: 12/4/2	004	Run ID: SV	OC-2_0412	05A
Client ID: ZZZZZ	Batch ID: 12089	TestN	o: SW8270C			Analysis Da	ate: 12/5/2	004	SeqNo: 31	8037	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	1.204	0.17	1.667	0	72.2	55	106	0	0		
1,4-Dichlorobenzene	1.149	0.17	1.667	0	68.9	55	90	0	0		
2,4-Dinitrotoluene	1.307	0.17	1.667	0	78.4	55	101	0	0		
2-Chlorophenol	2.424	0.17	3.333	0	72.7	61	91	0	0		
4-Chloro-3-methylphenol	2.869	0.17	3.333	0	86.1	62	100	0	0		
4-Nitrophenol	2.909	0.80	3.333	0	87.3	53	123	0	0		
Acenaphthene	1.306	0.17	1.667	0	78.4	65	101	0	0		
N-Nitrosodi-n-propylamine	1.494	0.17	1.667	0	89.6	55	100	0	0		
Pentachlorophenol	2.87	0.80	3.333	0	86.1	40	120	0	0		
Phenol	2.927	0.17	3.333	0	87.8	60	91	0	0		
Pyrene	1.317	0.17	1.667	0	79	50	131	0	0		
Sample ID 0412056-006BMS	SampType: MS	TestCod	le: SVOC_SC	IL Units: mg/Kg	-dry	Prep Da	te: 12/4/2	004	Run ID: SV	OC-2_0412	05A
Client ID: ZZZZZ	Batch ID: 12089	TestN	o: SW8270C			Analysis Da	ite: 12/5/2	004	SeqNo: 31	8043	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	1.725	0.21	2.102	0	82	55	106	0	0		
1,4-Dichlorobenzene	1.671	0.21	2.102	0	79.5	55	90	0	0		

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Work Order:

0412018

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12089

Sample ID 0412056-006BMS Client ID: ZZZZZ	SampType: MS		ode: SVOC_S (:No: SW8270C	,	g/Kg-dry	Prep Date				OC-2_04120	05A
Client ID: ZZZZZ	Batch ID: 12089	resi	.INO: 344627UC			Analysis Dat	e. 12/3/20	JU4	SeqNo: 31	0043	
Analyte	Resu	t PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	1.84	5 0.21	2.102	0	87.8	55	101	0	0		
2-Chlorophenol	3.31	9 0.21	4.203	0	78.9	61	91	0	0		
4-Chloro-3-methylphenol	3.54	1 0.21	4.203	0	84.2	62	100	0	0		
4-Nitrophenol	3.77	5 1.0	4.203	0	89.8	53	123	0	0		
Acenaphthene	1.75	4 0.21	2.102	0	83.4	65	101	0	0		
N-Nitrosodi-n-propylamine	2.07	9 0.21	2.102	0	98.9	55	100	0	0		
Pentachlorophenol	3.6	7 1.0	4.203	0	87.3	40	120	0	0		
Phenol	3.74	1 0.21	4.203	0	89	60	91	0	0		
Pyrene	1.8	9 0.21	2.102	0	89.9	50	131	0	0		
Sample ID 0412056-006BMSD	SampType: MSD	TestCo	ode: SVOC_SC	OIL Units: m	g/Kg-dry	Prep Date	e: 12/4/2 0	004	Run ID: SV	OC-2_04120)5A
Client ID: ZZZZZ	Batch ID: 12089	Test	No: SW8270C			Analysis Dat	e: 12/5/2 0	004	SeqNo: 31	8044	
Analyte	Resu	t PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	1.7	2 0.22	2.11	0	81.5	55	106	1.725	0.277	23	
1,4-Dichlorobenzene	1.59	7 0.22	2.11	0	75.7	55	90	1.671	4.51	27	
2,4-Dinitrotoluene	2.04	0.22	2.11	0	97	55	101	1.845	10.3	47	
2-Chlorophenol	3.26	4 0.22	4.219	0	77.4	61	91	3.319	1.66	50	
4-Chloro-3-methylphenol	3.97	6 0.22	4.219	0	94.2	62	100	3.541	11.6	33	
4-Nitrophenol	4.23	3 1.0	4.219	0	100	53	123	3.775	11.4	50	
Acenaphthene	1.8	7 0.22	2.11	0	88.6	65	101	1.754	6.40	19	
ALADA P. L. C.	2.17	7 0.22	2.11	0	103	55	100	2.079	4.61	38	S
N-Nitrosodi-n-propylamine	2.17										
N-Nitrosodi-n-propylamine Pentachlorophenol	4.21	3 1.0	4.219	0	99.9	40	120	3.67	13.8	47	
			4.219 4.219	0	99.9 89.4	40 60	120 91	3.67 3.741	13.8 0.752	47 35	

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Work Order: 0412018

Project:

ANALYTICAL QC SUMMARY REPORT

32088, Willow Street Station- General Iron

BatchID: R15509

Sample ID VBLK120504a-3	SampType: MBLK	TestCod	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	te:		Run ID: VC	A-3_04120	5A
Client ID: ZZZZZ	Batch ID: R15509	TestN	lo: SW5035/ 8	3260		Analysis Da	te: 12/5/2	004	SeqNo: 31	7871	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.0050									
1,1,2,2-Tetrachloroethane	ND	0.0050									
1,1,2-Trichloroethane	ND	0.0050									
1,1-Dichloroethane	ND	0.0050									
1,1-Dichloroethene	ND	0.0050									
1,2-Dichloroethane	ND	0.0050									
1,2-Dichloropropane	ND	0.0050									
2-Butanone	ND	0.010									
2-Hexanone	ND	0.010									
4-Methyl-2-pentanone	ND	0.010									
Acetone	ND	0.025									
Benzene	ND	0.0050									
Bromodichloromethane	ND	0.0050									
Bromoform	ND	0.0050									
Bromomethane	ND	0.010									
Carbon disulfide	ND	0.0050									
Carbon tetrachloride	ND	0.0050									
Chlorobenzene	ND	0.0050									
Chloroethane	ND	0.010									
Chloroform	ND	0.0050									
Chloromethane	ND	0.010									
cis-1,2-Dichloroethene	ND	0.0050									
cis-1,3-Dichloropropene	ND	0.0050									
Dibromochloromethane	ND	0.0050									
Ethylbenzene	ND	0.0050									
Methyl tert-butyl ether	ND	0.0050									
Methylene chloride	0.00098	0.010									J
Styrene	ND	0.0050									
Tetrachloroethene	ND	0.0050									
Toluene	ND	0.0050									
trans-1,2-Dichloroethene	ND	0.0050									

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Work Order: 0412018

32088, Willow Street Station-General Iron **Project:**

ANALYTICAL QC SUMMARY REPORT

BatchID: R15509

Sample ID VBLK120504a-3 Client ID: ZZZZZ	SampType: MBLK Batch ID: R15509		de: VOC_ENC	COR Units: mg/Kg		Prep Dat Analysis Da		004	Run ID: VC SeqNo: 31	_	5A
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	0.0050									
Trichloroethene	ND	0.0050									
Vinyl chloride	ND	0.0050									
Xylenes, Total	ND	0.010									

Sample ID VLCS120504a-3	SampType: LCS	TestCo	de: VOC_ENC	COR Units: mg/Kg		Prep Da	te:		Run ID: VC	OA-3_04120	5 A
Client ID: ZZZZZ	Batch ID: R15509	Test	No: SW5035/ 8	3260		Analysis Da	ite: 12/5/20	004	SeqNo: 31	7872	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.04659	0.0050	0.05	0	93.2	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.04981	0.0050	0.05	0	99.6	70	130	0	0		
1,1,2-Trichloroethane	0.04678	0.0050	0.05	0	93.6	70	130	0	0		
1,1-Dichloroethane	0.04999	0.0050	0.05	0	100	70	130	0	0		
1,1-Dichloroethene	0.04824	0.0050	0.05	0	96.5	70	130	0	0		
1,2-Dichloroethane	0.04607	0.0050	0.05	0	92.1	70	130	0	0		
1,2-Dichloropropane	0.04524	0.0050	0.05	0	90.5	70	130	0	0		
2-Butanone	0.04403	0.010	0.05	0	88.1	70	130	0	0		
2-Hexanone	0.04136	0.010	0.05	0	82.7	70	130	0	0		
4-Methyl-2-pentanone	0.04307	0.010	0.05	0	86.1	70	130	0	0		
Acetone	0.05897	0.025	0.05	0	118	50	150	0	0		
Benzene	0.04615	0.0050	0.05	0	92.3	70	130	0	0		
Bromodichloromethane	0.04484	0.0050	0.05	0	89.7	70	130	0	0		
Bromoform	0.04821	0.0050	0.05	0	96.4	70	130	0	0		
Bromomethane	0.06442	0.010	0.05	0	129	70	130	0	0		
Carbon disulfide	0.06213	0.0050	0.05	0	124	70	130	0	0		
Carbon tetrachloride	0.04714	0.0050	0.05	0	94.3	70	130	0	0		
Chlorobenzene	0.04667	0.0050	0.05	0	93.3	70	130	0	0		
Chloroethane	0.0562	0.010	0.05	0	112	70	130	0	0		
Chloroform	0.04856	0.0050	0.05	0	97.1	70	130	0	0		
Chloromethane	0.03702	0.010	0.05	0	74	70	130	0	0		
cis-1,2-Dichloroethene	0.04783	0.0050	0.05	0	95.7	70	130	0	0		

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Work Order:

0412018

32088, Willow Street Station-General Iron **Project:**

ANALYTICAL QC SUMMARY REPORT

BatchID: R15509

Sample ID VLCS120504a-3	SampType: LCS	TestCo	de: VOC_ENC	OR Units: mg/Kg		Prep Da	te:		Run ID: VO	A-3_041205	iΑ
Client ID: ZZZZZ	Batch ID: R15509	Test	lo: SW5035/8	3260		Analysis Da	ite: 12/5/20	004	SeqNo: 31	7872	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	0.04334	0.0050	0.05	0	86.7	70	130	0	0		
Dibromochloromethane	0.04933	0.0050	0.05	0	98.7	70	130	0	0		
Ethylbenzene	0.04764	0.0050	0.05	0	95.3	70	130	0	0		
Methyl tert-butyl ether	0.04583	0.0050	0.05	0	91.7	50	150	0	0		
Methylene chloride	0.04511	0.010	0.05	0.00098	88.3	70	130	0	0		
Styrene	0.0451	0.0050	0.05	0	90.2	70	130	0	0		
Tetrachloroethene	0.04914	0.0050	0.05	0	98.3	70	130	0	0		
Toluene	0.04606	0.0050	0.05	0	92.1	70	130	0	0		
trans-1,2-Dichloroethene	0.04866	0.0050	0.05	0	97.3	70	130	0	0		
trans-1,3-Dichloropropene	0.04719	0.0050	0.05	0	94.4	70	130	0	0		
Trichloroethene	0.04629	0.0050	0.05	0	92.6	70	130	0	0		
Vinyl chloride	0.04996	0.0050	0.05	0	99.9	70	130	0	0		
Xylenes, Total	0.1436	0.010	0.15	0	95.7	70	130	0	0		
Sample ID VLCSD120504a-3	SampType: LCSD	TestCo	de: VOC_ENC	OR Units: mg/Kg		Prep Da	te:		Run ID: VO	A-3_041205	iΑ
	SampType: LCSD Batch ID: R15509		de: VOC_ENC No: SW5035/8	• •		Prep Da Analysis Da		004	Run ID: VC SeqNo: 31		iA
Client ID: ZZZZZ			No: SW5035/8	• •	%REC	Analysis Da	ite: 12/5/2 0	004 RPD Ref Val			GA Qual
Client ID: ZZZZZ Analyte	Batch ID: R15509	TestN	No: SW5035/8	3260		Analysis Da	ite: 12/5/2 0		SeqNo: 31	7873	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane	Batch ID: R15509 Result	TestN PQL	No: SW5035/8 SPK value	SPK Ref Val	%REC	Analysis Da	ite: 12/5/2 0	RPD Ref Val	SeqNo: 31	7873 RPDLimit	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	Batch ID: R15509 Result 0.04919	PQL 0.0050	SPK value 0.05	SPK Ref Val	%REC 98.4	Analysis Da	HighLimit	RPD Ref Val 0.04659	SeqNo: 31 %RPD 5.43	RPDLimit 20	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane	Batch ID: R15509 Result 0.04919 0.05126	PQL 0.0050 0.0050	SPK value 0.05 0.05	SPK Ref Val 0 0	%REC 98.4 103	Analysis Da LowLimit 70 70	HighLimit 130 130	RPD Ref Val 0.04659 0.04981	SeqNo: 31 %RPD 5.43 2.87	7873 RPDLimit 20 20	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane	Result 0.04919 0.05126 0.04861	PQL 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05	SPK Ref Val 0 0 0	%REC 98.4 103 97.2	Analysis Da LowLimit 70 70 70	HighLimit 130 130 130	RPD Ref Val 0.04659 0.04981 0.04678	SeqNo: 31 %RPD 5.43 2.87 3.84	7873 RPDLimit 20 20 20 20	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane	Result 0.04919 0.05126 0.04861 0.05066	PQL 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0	%REC 98.4 103 97.2 101	Analysis Da LowLimit 70 70 70 70	HighLimit 130 130 130 130	RPD Ref Val 0.04659 0.04981 0.04678 0.04999	SeqNo: 31' %RPD 5.43 2.87 3.84 1.33	7873 RPDLimit 20 20 20 20 20 20	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2-Dichloroethane	Result 0.04919 0.05126 0.04861 0.05066 0.05118	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0	%REC 98.4 103 97.2 101 102	Analysis Da LowLimit 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130	RPD Ref Val 0.04659 0.04981 0.04678 0.04999 0.04824	SeqNo: 31 %RPD 5.43 2.87 3.84 1.33 5.91	7873 RPDLimit 20 20 20 20 20 20 20	
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane	Result 0.04919 0.05126 0.04861 0.05066 0.05118 0.04768	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0 0 0	%REC 98.4 103 97.2 101 102 95.4	Analysis Da LowLimit 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130	RPD Ref Val 0.04659 0.04981 0.04678 0.04999 0.04824 0.04607	SeqNo: 31 %RPD 5.43 2.87 3.84 1.33 5.91 3.43	7873 RPDLimit 20 20 20 20 20 20 20 20 20	
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone	Result 0.04919 0.05126 0.04861 0.05066 0.05118 0.04768 0.04864	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0	%REC 98.4 103 97.2 101 102 95.4 97.3	Analysis Da LowLimit 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130 130 13	RPD Ref Val 0.04659 0.04981 0.04678 0.04999 0.04824 0.04607 0.04524	SeqNo: 31' %RPD 5.43 2.87 3.84 1.33 5.91 3.43 7.24	7873 RPDLimit 20 20 20 20 20 20 20 20 20 20 20	
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone 2-Hexanone	Result 0.04919 0.05126 0.04861 0.05066 0.05118 0.04768 0.04864 0.05104	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0 0	%REC 98.4 103 97.2 101 102 95.4 97.3 102	Analysis Da LowLimit 70 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130 130 13	RPD Ref Val 0.04659 0.04981 0.04678 0.04999 0.04824 0.04607 0.04524 0.04403	SeqNo: 31' %RPD 5.43 2.87 3.84 1.33 5.91 3.43 7.24 14.7	7873 RPDLimit 20 20 20 20 20 20 20 20 20 20 20 20	
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone 2-Hexanone 4-Methyl-2-pentanone	Result 0.04919 0.05126 0.04861 0.05066 0.05118 0.04768 0.04864 0.05104 0.04263	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.010 0.010	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0 0 0 0	%REC 98.4 103 97.2 101 102 95.4 97.3 102 85.3	Analysis Da LowLimit 70 70 70 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130 130 13	RPD Ref Val 0.04659 0.04981 0.04678 0.04999 0.04824 0.04607 0.04524 0.04403 0.04136	SeqNo: 31' %RPD 5.43 2.87 3.84 1.33 5.91 3.43 7.24 14.7 3.02	7873 RPDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	
	Result 0.04919 0.05126 0.04861 0.05066 0.05118 0.04768 0.04864 0.05104 0.04263 0.04507	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0010 0.010 0.010	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	%REC 98.4 103 97.2 101 102 95.4 97.3 102 85.3 90.1	Analysis Da LowLimit 70 70 70 70 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130 130 13	RPD Ref Val 0.04659 0.04981 0.04678 0.04999 0.04824 0.04607 0.04524 0.04403 0.04136 0.04307	SeqNo: 31' %RPD 5.43 2.87 3.84 1.33 5.91 3.43 7.24 14.7 3.02 4.54	7873 RPDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order: 0412018

Project:

0412018 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15509

Sample ID VLCSD120504a-3	SampType: LCSD	TestCod	de: VOC_ENC	OR Units: mg/Kg		Prep Date) :		Run ID: VO	A-3_041205	A
Client ID: ZZZZZ	Batch ID: R15509	TestN	lo: SW5035/8	260		Analysis Date	e: 12/5/2 0	004	SeqNo: 317	7873	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.04908	0.0050	0.05	0	98.2	70	130	0.04821	1.79	20	
Bromomethane	0.06734	0.010	0.05	0	135	70	130	0.06442	4.43	20	S
Carbon disulfide	0.06308	0.0050	0.05	0	126	70	130	0.06213	1.52	20	
Carbon tetrachloride	0.05215	0.0050	0.05	0	104	70	130	0.04714	10.1	20	
Chlorobenzene	0.04781	0.0050	0.05	0	95.6	70	130	0.04667	2.41	20	
Chloroethane	0.05791	0.010	0.05	0	116	70	130	0.0562	3.00	20	
Chloroform	0.05001	0.0050	0.05	0	100	70	130	0.04856	2.94	20	
Chloromethane	0.03867	0.010	0.05	0	77.3	70	130	0.03702	4.36	20	
cis-1,2-Dichloroethene	0.05033	0.0050	0.05	0	101	70	130	0.04783	5.09	20	
cis-1,3-Dichloropropene	0.04572	0.0050	0.05	0	91.4	70	130	0.04334	5.34	20	
Dibromochloromethane	0.04948	0.0050	0.05	0	99	70	130	0.04933	0.304	20	
Ethylbenzene	0.05015	0.0050	0.05	0	100	70	130	0.04764	5.13	20	
Methyl tert-butyl ether	0.04635	0.0050	0.05	0	92.7	50	150	0.04583	1.13	20	
Methylene chloride	0.04707	0.010	0.05	0.00098	92.2	70	130	0.04511	4.25	20	
Styrene	0.04748	0.0050	0.05	0	95	70	130	0.0451	5.14	20	
Tetrachloroethene	0.0504	0.0050	0.05	0	101	70	130	0.04914	2.53	20	
Toluene	0.05003	0.0050	0.05	0	100	70	130	0.04606	8.26	20	
trans-1,2-Dichloroethene	0.0492	0.0050	0.05	0	98.4	70	130	0.04866	1.10	20	
trans-1,3-Dichloropropene	0.04948	0.0050	0.05	0	99	70	130	0.04719	4.74	20	
Trichloroethene	0.04981	0.0050	0.05	0	99.6	70	130	0.04629	7.33	20	
Vinyl chloride	0.05366	0.0050	0.05	0	107	70	130	0.04996	7.14	20	
Xylenes, Total	0.1482	0.010	0.15	0	98.8	70	130	0.1436	3.16	20	

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H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order: 0412018

Project:

0412018

32088, Willow Street Station-General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15478

Sample ID MBLK Client ID: ZZZZZ	SampType: MBLK Batch ID: R15478	TestCode: PMOIST TestNo: D2974	Units: wt%	Prep Date: 12/2/2004 Analysis Date: 12/3/2004	Run ID: BALANCE_041202A SeqNo: 317441
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Percent Moisture	ND	0.01000			*
Sample ID LCS-S	SampType: LCS	TestCode: PMOIST	Units: wt%	Prep Date: 12/2/2004	Run ID: BALANCE_041202A
Client ID: ZZZZZ	Batch ID: R15478	TestNo: D2974		Analysis Date: 12/3/2004	SeqNo: 317442
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Percent Moisture	4.6	0.01000 5	0	92 80 120 0	0 *
Sample ID LCS-W	SampType: LCS	TestCode: PMOIST	Units: wt%	Prep Date: 12/2/2004	Run ID: BALANCE_041202A
Client ID: ZZZZZ	Batch ID: R15478	TestNo: D2974		Analysis Date: 12/3/2004	SeqNo: 317443
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Percent Moisture	99.81	0.01000 99.8	0	100 80 120 0	0 *
Sample ID 0412056-001B DUP	SampType: DUP	TestCode: PMOIST	Units: wt%	Prep Date: 12/2/2004	Run ID: BALANCE_041202A
Client ID: ZZZZZ	Batch ID: R15478	TestNo: D2974		Analysis Date: 12/3/2004	SeqNo: 317463
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Percent Moisture	21.52	0.01000 0	0	0 0 0 21.46	0.279 20 *

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

R - RPD outside accepted recovery limits

2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

December 15, 2004

Burns & McDonnell 2601 W. 22nd Street

OakBrook, IL 60523-1229 Telephone: (312) 563-0371 Fax: (630) 990-0301

RE: 32088, Willow Street Station- General Iron STAT Project No: 0412027

Dear Diane Saftic:

STAT Analysis received 5 samples for the referenced project on 12/1/2004. The analytical results are presented in the following report.

This report is revised to reflect changes made after the initial report was issued.

All analyses were performed in accordance with the requirements of 35 IAC part 186 (Accreditation #100445). Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 563-0371.

Sincerely,

Craig Chawla

Project Manager

The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory.

Date: December 15, 2004

Client:	Burns & McDonnell
Chent:	Duriis & McDonnen

Project: 32088, Willow Street Station- General Iron Work Order Sample Summary

Lab Order: 0412027

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
0412027-001A	WSS-SB47-001	12-14'	12/1/2004 8:05:00 AM	12/1/2004
0412027-001B	WSS-SB47-001	12-14'	12/1/2004 8:05:00 AM	12/1/2004
0412027-002A	WSS-SB47-002	16-18'	12/1/2004 8:20:00 AM	12/1/2004
0412027-002B	WSS-SB47-002	16-18'	12/1/2004 8:20:00 AM	12/1/2004
0412027-003A	WSS-SB51-001	10-12'	12/1/2004 11:55:00 AM	12/1/2004
0412027-003B	WSS-SB51-001	10-12'	12/1/2004 11:55:00 AM	12/1/2004
0412027-004A	WSS-SB51-002	18-20'	12/1/2004 12:40:00 PM	12/1/2004
0412027-004B	WSS-SB51-002	18-20'	12/1/2004 12:40:00 PM	12/1/2004
0412027-005A	TB03			12/1/2004

Date: *December 15, 2004*

CLIENT: Burns & McDonnell

Project: 32088, Willow Street Station-General Iron CASE NARRATIVE

Lab Order: 0412027

Due to matrix interference, sample WSS-SB51-001 (0412027-003) had high SVOC soil surrogate recovery for 2-Fluorobiphenyl (120% Recovery, QC Limits 30-115%).

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client:** Client Sample ID: WSS-SB47-001

Lab Order: 0412027 Tag Number: 12-14'

Project: 32088, Willow Street Station-General Iron **Collection Date:** 12/1/2004 8:05:00 AM

Lab ID: 0412027-001A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50)35/8260E	B Prep	Date: 12/2/2004	Analyst: PS
Acetone	ND	0.035	mg/Kg-dry	1	12/5/2004
Benzene	0.05	0.0071	mg/Kg-dry	1	12/5/2004
Bromodichloromethane	ND	0.0071	mg/Kg-dry	1	12/5/2004
Bromoform	ND	0.0071	mg/Kg-dry	1	12/5/2004
Bromomethane	ND	0.014	mg/Kg-dry	1	12/5/2004
2-Butanone	ND	0.014	mg/Kg-dry	1	12/5/2004
Carbon disulfide	ND	0.0071	mg/Kg-dry	1	12/5/2004
Carbon tetrachloride	ND	0.0071	mg/Kg-dry	1	12/5/2004
Chlorobenzene	ND	0.0071	mg/Kg-dry	1	12/5/2004
Chloroethane	ND	0.014	mg/Kg-dry	1	12/5/2004
Chloroform	ND	0.0071	mg/Kg-dry	1	12/5/2004
Chloromethane	ND	0.0071	mg/Kg-dry	1	12/5/2004
Dibromochloromethane	ND	0.0071	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethane	ND	0.0071	mg/Kg-dry	1	12/5/2004
1,2-Dichloroethane	ND	0.0071	mg/Kg-dry	1	12/5/2004
1,1-Dichloroethene	ND	0.0071	mg/Kg-dry	1	12/5/2004
cis-1,2-Dichloroethene	ND	0.0071	mg/Kg-dry	1	12/5/2004
trans-1,2-Dichloroethene	ND	0.0071	mg/Kg-dry	1	12/5/2004
1,2-Dichloropropane	ND	0.0071	mg/Kg-dry	1	12/5/2004
cis-1,3-Dichloropropene	ND	0.0071	mg/Kg-dry	1	12/5/2004
trans-1,3-Dichloropropene	ND	0.0071	mg/Kg-dry	1	12/5/2004
Ethylbenzene	0.33	0.0071	mg/Kg-dry	1	12/5/2004
2-Hexanone	ND	0.014	mg/Kg-dry	1	12/5/2004
4-Methyl-2-pentanone	ND	0.014	mg/Kg-dry	1	12/5/2004
Methylene chloride	ND	0.014	mg/Kg-dry	1	12/5/2004
Methyl tert-butyl ether	ND	0.0071	mg/Kg-dry	1	12/5/2004
Styrene	ND	0.0071	mg/Kg-dry	1	12/5/2004
1,1,2,2-Tetrachloroethane	ND	0.0071	mg/Kg-dry	1	12/5/2004
Tetrachloroethene	ND	0.0071	mg/Kg-dry	1	12/5/2004
Toluene	ND	0.0071	mg/Kg-dry	1	12/5/2004
1,1,1-Trichloroethane	ND	0.0071	mg/Kg-dry	1	12/5/2004
1,1,2-Trichloroethane	ND	0.0071	mg/Kg-dry	1	12/5/2004
Trichloroethene	ND	0.0071	mg/Kg-dry	1	12/5/2004
Vinyl chloride	ND	0.0071	mg/Kg-dry	1	12/5/2004
Xylenes, Total	0.26	0.014	mg/Kg-dry	1	12/5/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range H - Holding time exceeded

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB47-001

Lab Order: 0412027 **Tag Number:** 12-14'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/1/2004 8:05:00 AM

Lab ID: 0412027-001B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF I	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SW	/3580A)	Prep	Date: 12/6/2004	Analyst: JF
TPH (Gasoline)	ND	27	* n	ng/Kg-dry	1	12/7/2004
TPH (Diesel)	100	27	* n	ng/Kg-dry	1	12/7/2004
TPH (Oil)	97	27	* n	ng/Kg-dry	1	12/7/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550B) Prep	Date: 12/4/2004	Analyst: VS
Acenaphthene	22	3.3	n	ng/Kg-dry	100	12/7/2004
Acenaphthylene	2.7	0.33	n	ng/Kg-dry	10	12/6/2004
Anthracene	11	3.3	n	ng/Kg-dry	100	12/7/2004
Benz(a)anthracene	9	3.3	n	ng/Kg-dry	100	12/7/2004
Benzo(b)fluoranthene	4.5	3.3	n	ng/Kg-dry	100	12/7/2004
Benzo(k)fluoranthene	5.1	3.3	n	ng/Kg-dry	100	12/7/2004
Benzo(g,h,i)perylene	3.9	3.3	n	ng/Kg-dry	100	12/7/2004
Benzo(a)pyrene	4.6	3.3	n	ng/Kg-dry	100	12/7/2004
Chrysene	8	3.3	n	ng/Kg-dry	100	12/7/2004
Dibenz(a,h)anthracene	0.91	0.33	n	ng/Kg-dry	10	12/6/2004
Fluoranthene	20	3.3	n	ng/Kg-dry	100	12/7/2004
Fluorene	13	3.3	n	ng/Kg-dry	100	12/7/2004
Indeno(1,2,3-cd)pyrene	2.5	0.33	n	ng/Kg-dry	10	12/6/2004
Naphthalene	33	3.3	n	ng/Kg-dry	100	12/7/2004
Phenanthrene	43	3.3	n	ng/Kg-dry	100	12/7/2004
Pyrene	26	3.3	n	ng/Kg-dry	100	12/7/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	/3550B)	Prep	Date: 12/4/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.44	-	ng/Kg-dry	1	12/7/2004
Bis(2-chloroethyl)ether	ND	0.44	n	ng/Kg-dry	1	12/7/2004
Bis(2-ethylhexyl)phthalate	ND	0.44	n	ng/Kg-dry	1	12/7/2004
4-Bromophenyl phenyl ether	ND	0.44	n	ng/Kg-dry	1	12/7/2004
Butyl benzyl phthalate	ND	0.44	n	ng/Kg-dry	1	12/7/2004
Carbazole	1.1	0.44	n	ng/Kg-dry	1	12/7/2004
4-Chloro-3-methylphenol	ND	0.44	n	ng/Kg-dry	1	12/7/2004
4-Chloroaniline	ND	0.44		ng/Kg-dry	1	12/7/2004
2-Chloronaphthalene	ND	0.44	n	ng/Kg-dry	1	12/7/2004
2-Chlorophenol	ND	0.44		ng/Kg-dry	1	12/7/2004
4-Chlorophenyl phenyl ether	ND	0.44		ng/Kg-dry	1	12/7/2004
Dibenzofuran	2.5	0.44		ng/Kg-dry	1	12/7/2004
1,2-Dichlorobenzene	ND	0.44	n	ng/Kg-dry	1	12/7/2004
1,3-Dichlorobenzene	ND	0.44		ng/Kg-dry	1	12/7/2004
1,4-Dichlorobenzene	ND	0.44		ng/Kg-dry	1	12/7/2004
3,3'-Dichlorobenzidine	ND	0.88		ng/Kg-dry	1	12/7/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 2 of 12

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Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB47-001

Lab Order: 0412027 **Tag Number:** 12-14'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/1/2004 8:05:00 AM

Lab ID: 0412027-001B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF I	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW:	3550B)	Prep	Date: 12/4/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.44	m	g/Kg-dry	1	12/7/2004
Diethyl phthalate	ND	0.44	m	g/Kg-dry	1	12/7/2004
Dimethyl phthalate	ND	0.44	m	g/Kg-dry	1	12/7/2004
Di-n-butyl phthalate	ND	0.44	m	g/Kg-dry	1	12/7/2004
2,4-Dimethylphenol	ND	0.44	m	g/Kg-dry	1	12/7/2004
4,6-Dinitro-2-methylphenol	ND	2.1	m	g/Kg-dry	1	12/7/2004
2,4-Dinitrophenol	ND	2.1	m	g/Kg-dry	1	12/7/2004
2,4-Dinitrotoluene	ND	0.23	m	g/Kg-dry	1	12/7/2004
2,6-Dinitrotoluene	ND	0.23	m	g/Kg-dry	1	12/7/2004
Di-n-octyl phthalate	ND	0.44	m	g/Kg-dry	1	12/7/2004
Hexachlorobenzene	ND	0.44	m	g/Kg-dry	1	12/7/2004
Hexachlorobutadiene	ND	0.44	m	g/Kg-dry	1	12/7/2004
Hexachlorocyclopentadiene	ND	0.44	m	g/Kg-dry	1	12/7/2004
Hexachloroethane	ND	0.44	m	g/Kg-dry	1	12/7/2004
Isophorone	ND	0.44	m	g/Kg-dry	1	12/7/2004
2-Methylnaphthalene	27	2.2	m	g/Kg-dry	5	12/8/2004
2-Methylphenol	ND	0.44	m	g/Kg-dry	1	12/7/2004
4-Methylphenol	ND	0.44	m	g/Kg-dry	1	12/7/2004
2-Nitroaniline	ND	2.1	m	g/Kg-dry	1	12/7/2004
3-Nitroaniline	ND	2.1	m	g/Kg-dry	1	12/7/2004
4-Nitroaniline	ND	2.1	m	g/Kg-dry	1	12/7/2004
Nitrobenzene	ND	0.23	m	g/Kg-dry	1	12/7/2004
2-Nitrophenol	ND	0.44	m	g/Kg-dry	1	12/7/2004
4-Nitrophenol	ND	2.1	m	g/Kg-dry	1	12/7/2004
N-Nitrosodi-n-propylamine	ND	0.23	m	g/Kg-dry	1	12/7/2004
N-Nitrosodiphenylamine	ND	0.44	m	g/Kg-dry	1	12/7/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.44	m	g/Kg-dry	1	12/7/2004
Pentachlorophenol	ND	2.1	m	g/Kg-dry	1	12/7/2004
Phenol	ND	0.44	m	g/Kg-dry	1	12/7/2004
1,2,4-Trichlorobenzene	ND	0.44	m	g/Kg-dry	1	12/7/2004
2,4,5-Trichlorophenol	ND	0.88	m	g/Kg-dry	1	12/7/2004
2,4,6-Trichlorophenol	ND	0.44	m	g/Kg-dry	1	12/7/2004
Percent Moisture	D2974	ļ		Prep	Date: 12/1/2004	Analyst: RW
Percent Moisture	27.32	0.01	*	wt%	1	12/2/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 3 of 12

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client:** Client Sample ID: WSS-SB47-002

Lab Order: 0412027 Tag Number: 16-18'

Project: 32088, Willow Street Station-General Iron **Collection Date:** 12/1/2004 8:20:00 AM

Lab ID: 0412027-002A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50)35/8260E	B Prep	Date: 12/2/2004	Analyst: PS
Acetone	ND	0.032	mg/Kg-dry	1	12/4/2004
Benzene	ND	0.0065	mg/Kg-dry	1	12/4/2004
Bromodichloromethane	ND	0.0065	mg/Kg-dry	1	12/4/2004
Bromoform	ND	0.0065	mg/Kg-dry	1	12/4/2004
Bromomethane	ND	0.013	mg/Kg-dry	1	12/4/2004
2-Butanone	ND	0.013	mg/Kg-dry	1	12/4/2004
Carbon disulfide	ND	0.0065	mg/Kg-dry	1	12/4/2004
Carbon tetrachloride	ND	0.0065	mg/Kg-dry	1	12/4/2004
Chlorobenzene	ND	0.0065	mg/Kg-dry	1	12/4/2004
Chloroethane	ND	0.013	mg/Kg-dry	1	12/4/2004
Chloroform	ND	0.0065	mg/Kg-dry	1	12/4/2004
Chloromethane	ND	0.0065	mg/Kg-dry	1	12/4/2004
Dibromochloromethane	ND	0.0065	mg/Kg-dry	1	12/4/2004
1,1-Dichloroethane	ND	0.0065	mg/Kg-dry	1	12/4/2004
1,2-Dichloroethane	ND	0.0065	mg/Kg-dry	1	12/4/2004
1,1-Dichloroethene	ND	0.0065	mg/Kg-dry	1	12/4/2004
cis-1,2-Dichloroethene	ND	0.0065	mg/Kg-dry	1	12/4/2004
trans-1,2-Dichloroethene	ND	0.0065	mg/Kg-dry	1	12/4/2004
1,2-Dichloropropane	ND	0.0065	mg/Kg-dry	1	12/4/2004
cis-1,3-Dichloropropene	ND	0.0065	mg/Kg-dry	1	12/4/2004
trans-1,3-Dichloropropene	ND	0.0065	mg/Kg-dry	1	12/4/2004
Ethylbenzene	ND	0.0065	mg/Kg-dry	1	12/4/2004
2-Hexanone	ND	0.013	mg/Kg-dry	1	12/4/2004
4-Methyl-2-pentanone	ND	0.013	mg/Kg-dry	1	12/4/2004
Methylene chloride	ND	0.013	mg/Kg-dry	1	12/4/2004
Methyl tert-butyl ether	ND	0.0065	mg/Kg-dry	1	12/4/2004
Styrene	ND	0.0065	mg/Kg-dry	1	12/4/2004
1,1,2,2-Tetrachloroethane	ND	0.0065	mg/Kg-dry	1	12/4/2004
Tetrachloroethene	ND	0.0065	mg/Kg-dry	1	12/4/2004
Toluene	ND	0.0065	mg/Kg-dry	1	12/4/2004
1,1,1-Trichloroethane	ND	0.0065	mg/Kg-dry	1	12/4/2004
1,1,2-Trichloroethane	ND	0.0065	mg/Kg-dry	1	12/4/2004
Trichloroethene	ND	0.0065	mg/Kg-dry	1	12/4/2004
Vinyl chloride	ND	0.0065	mg/Kg-dry	1	12/4/2004
Xylenes, Total	ND	0.013	mg/Kg-dry	1	12/4/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB47-002

Lab Order: 0412027 **Tag Number:** 16-18'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/1/2004 8:20:00 AM

Lab ID: 0412027-002B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW8	015M (SW	(3580A)	Prep	Date: 12/6/200	4 Analyst: JF
TPH (Gasoline)	ND	25	* n	ng/Kg-dry	1	12/7/2004
TPH (Diesel)	ND	25	* n	ng/Kg-dry	1	12/7/2004
TPH (Oil)	ND	25	* n	ng/Kg-dry	1	12/7/2004
Polynuclear Aromatic Hydrocarbons	SW8	270C-SIM	(SW3550B) Prep	Date: 12/4/200	4 Analyst: VS
Acenaphthene	0.074	0.031	n	ng/Kg-dry	1	12/5/2004
Acenaphthylene	ND	0.031	n	ng/Kg-dry	1	12/5/2004
Anthracene	ND	0.031	n	ng/Kg-dry	1	12/5/2004
Benz(a)anthracene	0.032	0.031	n	ng/Kg-dry	1	12/5/2004
Benzo(b)fluoranthene	ND	0.031	n	ng/Kg-dry	1	12/5/2004
Benzo(k)fluoranthene	ND	0.031	n	ng/Kg-dry	1	12/5/2004
Benzo(g,h,i)perylene	ND	0.031	n	ng/Kg-dry	1	12/5/2004
Benzo(a)pyrene	ND	0.031	n	ng/Kg-dry	1	12/5/2004
Chrysene	0.048	0.031	n	ng/Kg-dry	1	12/5/2004
Dibenz(a,h)anthracene	ND	0.031	n	ng/Kg-dry	1	12/5/2004
Fluoranthene	0.072	0.031	n	ng/Kg-dry	1	12/5/2004
Fluorene	0.04	0.031	n	ng/Kg-dry	1	12/5/2004
Indeno(1,2,3-cd)pyrene	ND	0.031	n	ng/Kg-dry	1	12/5/2004
Naphthalene	0.13	0.031	n	ng/Kg-dry	1	12/5/2004
Phenanthrene	0.12	0.031	n	ng/Kg-dry	1	12/5/2004
Pyrene	0.088	0.031	n	ng/Kg-dry	1	12/5/2004
Semivolatile Organic Compounds by GC/MS	SW8	270C (SW	3550B)	Prep	Date: 12/4/200	4 Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.41		ng/Kg-dry	1	12/6/2004
Bis(2-chloroethyl)ether	ND	0.41	n	ng/Kg-dry	1	12/6/2004
Bis(2-ethylhexyl)phthalate	ND	0.41	n	ng/Kg-dry	1	12/6/2004
4-Bromophenyl phenyl ether	ND	0.41	n	ng/Kg-dry	1	12/6/2004
Butyl benzyl phthalate	ND	0.41	n	ng/Kg-dry	1	12/6/2004
Carbazole	ND	0.41		ng/Kg-dry	1	12/6/2004
4-Chloro-3-methylphenol	ND	0.41		ng/Kg-dry	1	12/6/2004
4-Chloroaniline	ND	0.41	n	ng/Kg-dry	1	12/6/2004
2-Chloronaphthalene	ND	0.41		ng/Kg-dry	1	12/6/2004
2-Chlorophenol	ND	0.41	n	ng/Kg-dry	1	12/6/2004
4-Chlorophenyl phenyl ether	ND	0.41		ng/Kg-dry	1	12/6/2004
Dibenzofuran	ND	0.41		ng/Kg-dry	1	12/6/2004
1,2-Dichlorobenzene	ND	0.41		ng/Kg-dry	1	12/6/2004
1,3-Dichlorobenzene	ND	0.41		ng/Kg-dry	1	12/6/2004
1,4-Dichlorobenzene	ND	0.41		ng/Kg-dry	1	12/6/2004
3,3´-Dichlorobenzidine	ND	0.82		ng/Kg-dry	1	12/6/2004
•						

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB47-002

Lab Order: 0412027 **Tag Number:** 16-18'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/1/2004 8:20:00 AM

Lab ID: 0412027-002B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW3	3550B)	Prep	Date: 12/4/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.41	m	ng/Kg-dry	1	12/6/2004
Diethyl phthalate	ND	0.41	m	ng/Kg-dry	1	12/6/2004
Dimethyl phthalate	ND	0.41	m	ng/Kg-dry	1	12/6/2004
Di-n-butyl phthalate	ND	0.41	m	ng/Kg-dry	1	12/6/2004
2,4-Dimethylphenol	ND	0.41	m	ng/Kg-dry	1	12/6/2004
4,6-Dinitro-2-methylphenol	ND	2	m	ng/Kg-dry	1	12/6/2004
2,4-Dinitrophenol	ND	2	m	ng/Kg-dry	1	12/6/2004
2,4-Dinitrotoluene	ND	0.21	m	ng/Kg-dry	1	12/6/2004
2,6-Dinitrotoluene	ND	0.21	m	ng/Kg-dry	1	12/6/2004
Di-n-octyl phthalate	ND	0.41	m	ng/Kg-dry	1	12/6/2004
Hexachlorobenzene	ND	0.41	m	ng/Kg-dry	1	12/6/2004
Hexachlorobutadiene	ND	0.41	m	ng/Kg-dry	1	12/6/2004
Hexachlorocyclopentadiene	ND	0.41	m	ng/Kg-dry	1	12/6/2004
Hexachloroethane	ND	0.41	m	ng/Kg-dry	1	12/6/2004
Isophorone	ND	0.41	m	ng/Kg-dry	1	12/6/2004
2-Methylnaphthalene	ND	0.41	m	ng/Kg-dry	1	12/6/2004
2-Methylphenol	ND	0.41	m	ng/Kg-dry	1	12/6/2004
4-Methylphenol	ND	0.41	m	ng/Kg-dry	1	12/6/2004
2-Nitroaniline	ND	2	m	ng/Kg-dry	1	12/6/2004
3-Nitroaniline	ND	2	m	ng/Kg-dry	1	12/6/2004
4-Nitroaniline	ND	2	m	ng/Kg-dry	1	12/6/2004
Nitrobenzene	ND	0.21	m	ng/Kg-dry	1	12/6/2004
2-Nitrophenol	ND	0.41	m	ng/Kg-dry	1	12/6/2004
4-Nitrophenol	ND	2	m	ng/Kg-dry	1	12/6/2004
N-Nitrosodi-n-propylamine	ND	0.21	m	ng/Kg-dry	1	12/6/2004
N-Nitrosodiphenylamine	ND	0.41	m	ng/Kg-dry	1	12/6/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.41	m	ng/Kg-dry	1	12/6/2004
Pentachlorophenol	ND	2	m	ng/Kg-dry	1	12/6/2004
Phenol	ND	0.41	m	ng/Kg-dry	1	12/6/2004
1,2,4-Trichlorobenzene	ND	0.41	m	ng/Kg-dry	1	12/6/2004
2,4,5-Trichlorophenol	ND	0.82	m	ng/Kg-dry	1	12/6/2004
2,4,6-Trichlorophenol	ND	0.41	m	ng/Kg-dry	1	12/6/2004
Percent Moisture	D2974	ļ		Prep	Date: 12/1/2004	Analyst: RW
Percent Moisture	20.84	0.01	*	wt%	1	12/2/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547 Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client: Client Sample ID:** WSS-SB51-001

Lab Order: 0412027 Tag Number: 10-12'

Project: 32088, Willow Street Station-General Iron **Collection Date:** 12/1/2004 11:55:00 AM

Lab ID: 0412027-003A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50	35/8260E	B Prep	Date: 12/2/2004	Analyst: PS
Acetone	ND	0.03	mg/Kg-dry	1	12/4/2004
Benzene	3.7	0.34	mg/Kg-dry	50	12/5/2004
Bromodichloromethane	ND	0.006	mg/Kg-dry	1	12/4/2004
Bromoform	ND	0.006	mg/Kg-dry	1	12/4/2004
Bromomethane	ND	0.012	mg/Kg-dry	1	12/4/2004
2-Butanone	ND	0.012	mg/Kg-dry	1	12/4/2004
Carbon disulfide	ND	0.006	mg/Kg-dry	1	12/4/2004
Carbon tetrachloride	ND	0.006	mg/Kg-dry	1	12/4/2004
Chlorobenzene	ND	0.006	mg/Kg-dry	1	12/4/2004
Chloroethane	ND	0.012	mg/Kg-dry	1	12/4/2004
Chloroform	ND	0.006	mg/Kg-dry	1	12/4/2004
Chloromethane	ND	0.006	mg/Kg-dry	1	12/4/2004
Dibromochloromethane	ND	0.006	mg/Kg-dry	1	12/4/2004
1,1-Dichloroethane	ND	0.006	mg/Kg-dry	1	12/4/2004
1,2-Dichloroethane	ND	0.006	mg/Kg-dry	1	12/4/2004
1,1-Dichloroethene	ND	0.006	mg/Kg-dry	1	12/4/2004
cis-1,2-Dichloroethene	ND	0.006	mg/Kg-dry	1	12/4/2004
trans-1,2-Dichloroethene	ND	0.006	mg/Kg-dry	1	12/4/2004
1,2-Dichloropropane	ND	0.006	mg/Kg-dry	1	12/4/2004
cis-1,3-Dichloropropene	ND	0.006	mg/Kg-dry	1	12/4/2004
trans-1,3-Dichloropropene	ND	0.006	mg/Kg-dry	1	12/4/2004
Ethylbenzene	5.8	0.34	mg/Kg-dry	50	12/5/2004
2-Hexanone	ND	0.012	mg/Kg-dry	1	12/4/2004
4-Methyl-2-pentanone	ND	0.012	mg/Kg-dry	1	12/4/2004
Methylene chloride	ND	0.012	mg/Kg-dry	1	12/4/2004
Methyl tert-butyl ether	ND	0.006	mg/Kg-dry	1	12/4/2004
Styrene	ND	0.006	mg/Kg-dry	1	12/4/2004
1,1,2,2-Tetrachloroethane	ND	0.006	mg/Kg-dry	1	12/4/2004
Tetrachloroethene	ND	0.006	mg/Kg-dry	1	12/4/2004
Toluene	0.0094	0.006	mg/Kg-dry	1	12/4/2004
1,1,1-Trichloroethane	ND	0.006	mg/Kg-dry	1	12/4/2004
1,1,2-Trichloroethane	ND	0.006	mg/Kg-dry	1	12/4/2004
Trichloroethene	ND	0.006	mg/Kg-dry	1	12/4/2004
Vinyl chloride	ND	0.006	mg/Kg-dry	1	12/4/2004
Xylenes, Total	3.9	0.68	mg/Kg-dry	50	12/5/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Page 7 of 12 H - Holding time exceeded

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB51-001

Lab Order: 0412027 **Tag Number:** 10-12'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/1/2004 11:55:00 AM

Lab ID: 0412027-003B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW801	15M (SV	/3580A)	Prep	Date: 12/6/2004	Analyst: JF
TPH (Gasoline)	26	26	•	ng/Kg-dry	1	12/7/2004
TPH (Diesel)	290	26	* r	ng/Kg-dry	1	12/7/2004
TPH (Oil)	290	26	* r	mg/Kg-dry	1	12/7/2004
Polynuclear Aromatic Hydrocarbons	SW827	70C-SIM	(SW3550B) Prep	Date: 12/4/2004	Analyst: VS
Acenaphthene	28	3.3	r	mg/Kg-dry	100	12/7/2004
Acenaphthylene	4.1	3.3	r	mg/Kg-dry	100	12/7/2004
Anthracene	20	3.3	r	mg/Kg-dry	100	12/7/2004
Benz(a)anthracene	17	3.3	r	mg/Kg-dry	100	12/7/2004
Benzo(b)fluoranthene	8.2	3.3	r	mg/Kg-dry	100	12/7/2004
Benzo(k)fluoranthene	7.4	3.3	r	mg/Kg-dry	100	12/7/2004
Benzo(g,h,i)perylene	8	3.3	r	mg/Kg-dry	100	12/7/2004
Benzo(a)pyrene	16	3.3	r	ng/Kg-dry	100	12/7/2004
Chrysene	17	3.3	r	ng/Kg-dry	100	12/7/2004
Dibenz(a,h)anthracene	1.4	0.33	r	ng/Kg-dry	10	12/6/2004
Fluoranthene	36	33	r	ng/Kg-dry	1000	12/7/2004
Fluorene	21	3.3	r	ng/Kg-dry	100	12/7/2004
Indeno(1,2,3-cd)pyrene	6.2	3.3	r	ng/Kg-dry	100	12/7/2004
Naphthalene	67	33	r	ng/Kg-dry	1000	12/7/2004
Phenanthrene	78	33	r	ng/Kg-dry	1000	12/7/2004
Pyrene	50	33	r	mg/Kg-dry	1000	12/7/2004
Semivolatile Organic Compounds by GC/MS	SW827	70C (SW	/3550B)	Prep	Date: 12/4/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.44	=	ng/Kg-dry	1	12/7/2004
Bis(2-chloroethyl)ether	ND	0.44	r	ng/Kg-dry	1	12/7/2004
Bis(2-ethylhexyl)phthalate	ND	0.44	r	ng/Kg-dry	1	12/7/2004
4-Bromophenyl phenyl ether	ND	0.44	r	ng/Kg-dry	1	12/7/2004
Butyl benzyl phthalate	ND	0.44	r	ng/Kg-dry	1	12/7/2004
Carbazole	4.8	0.44	r	ng/Kg-dry	1	12/7/2004
4-Chloro-3-methylphenol	ND	0.44		ng/Kg-dry	1	12/7/2004
4-Chloroaniline	ND	0.44	r	ng/Kg-dry	1	12/7/2004
2-Chloronaphthalene	ND	0.44	r	ng/Kg-dry	1	12/7/2004
2-Chlorophenol	ND	0.44	r	ng/Kg-dry	1	12/7/2004
4-Chlorophenyl phenyl ether	ND	0.44	r	ng/Kg-dry	1	12/7/2004
Dibenzofuran	3.4	0.44		ng/Kg-dry	1	12/7/2004
1,2-Dichlorobenzene	ND	0.44	r	ng/Kg-dry	1	12/7/2004
1,3-Dichlorobenzene	ND	0.44		ng/Kg-dry	1	12/7/2004
1,4-Dichlorobenzene	ND	0.44		ng/Kg-dry	1	12/7/2004
3,3´-Dichlorobenzidine	ND	0.87	r	ng/Kg-dry	1	12/7/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 8 of 12

2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB51-001

Lab Order: 0412027 **Tag Number:** 10-12'

Project: 32088, Willow Street Station-General Iron Collection Date: 12/1/2004 11:55:00 AM

Lab ID: 0412027-003B **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	3550B) Pre	p Date: 12/4/200 4	4 Analyst: PAB
2,4-Dichlorophenol	ND	0.44	mg/Kg-dry	1	12/7/2004
Diethyl phthalate	ND	0.44	mg/Kg-dry	1	12/7/2004
Dimethyl phthalate	ND	0.44	mg/Kg-dry	1	12/7/2004
Di-n-butyl phthalate	ND	0.44	mg/Kg-dry	1	12/7/2004
2,4-Dimethylphenol	ND	0.44	mg/Kg-dry	1	12/7/2004
4,6-Dinitro-2-methylphenol	ND	2.1	mg/Kg-dry	1	12/7/2004
2,4-Dinitrophenol	ND	2.1	mg/Kg-dry	1	12/7/2004
2,4-Dinitrotoluene	ND	0.22	mg/Kg-dry	1	12/7/2004
2,6-Dinitrotoluene	ND	0.22	mg/Kg-dry	1	12/7/2004
Di-n-octyl phthalate	ND	0.44	mg/Kg-dry	1	12/7/2004
Hexachlorobenzene	ND	0.44	mg/Kg-dry	1	12/7/2004
Hexachlorobutadiene	ND	0.44	mg/Kg-dry	1	12/7/2004
Hexachlorocyclopentadiene	ND	0.44	mg/Kg-dry	1	12/7/2004
Hexachloroethane	ND	0.44	mg/Kg-dry	1	12/7/2004
Isophorone	ND	0.44	mg/Kg-dry	1	12/7/2004
2-Methylnaphthalene	52	4.4	mg/Kg-dry	10	12/8/2004
2-Methylphenol	ND	0.44	mg/Kg-dry	1	12/7/2004
4-Methylphenol	ND	0.44	mg/Kg-dry	1	12/7/2004
2-Nitroaniline	ND	2.1	mg/Kg-dry	1	12/7/2004
3-Nitroaniline	ND	2.1	mg/Kg-dry	1	12/7/2004
4-Nitroaniline	ND	2.1	mg/Kg-dry	1	12/7/2004
Nitrobenzene	ND	0.22	mg/Kg-dry	1	12/7/2004
2-Nitrophenol	ND	0.44	mg/Kg-dry	1	12/7/2004
4-Nitrophenol	ND	2.1	mg/Kg-dry	1	12/7/2004
N-Nitrosodi-n-propylamine	ND	0.22	mg/Kg-dry	1	12/7/2004
N-Nitrosodiphenylamine	ND	0.44	mg/Kg-dry	1	12/7/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.44	mg/Kg-dry	1	12/7/2004
Pentachlorophenol	ND	2.1	mg/Kg-dry	1	12/7/2004
Phenol	ND	0.44	mg/Kg-dry	1	12/7/2004
1,2,4-Trichlorobenzene	ND	0.44	mg/Kg-dry	1	12/7/2004
2,4,5-Trichlorophenol	ND	0.87	mg/Kg-dry	1	12/7/2004
2,4,6-Trichlorophenol	ND	0.44	mg/Kg-dry	1	12/7/2004
Percent Moisture	D2974	ı	Pre	p Date: 12/1/200 4	4 Analyst: RW
Percent Moisture	25.20	0.01	* wt%	1	12/2/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 9 of 12

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client: Client Sample ID:** WSS-SB51-002

Lab Order: 0412027 Tag Number: 18-20'

Project: 32088, Willow Street Station-General Iron **Collection Date:** 12/1/2004 12:40:00 PM

Lab ID: 0412027-004A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50)35/8260E	B Prep	Date: 12/2/2004	Analyst: PS
Acetone	ND	0.027	mg/Kg-dry	1	12/4/2004
Benzene	ND	0.0055	mg/Kg-dry	1	12/4/2004
Bromodichloromethane	ND	0.0055	mg/Kg-dry	1	12/4/2004
Bromoform	ND	0.0055	mg/Kg-dry	1	12/4/2004
Bromomethane	ND	0.011	mg/Kg-dry	1	12/4/2004
2-Butanone	ND	0.011	mg/Kg-dry	1	12/4/2004
Carbon disulfide	ND	0.0055	mg/Kg-dry	1	12/4/2004
Carbon tetrachloride	ND	0.0055	mg/Kg-dry	1	12/4/2004
Chlorobenzene	ND	0.0055	mg/Kg-dry	1	12/4/2004
Chloroethane	ND	0.011	mg/Kg-dry	1	12/4/2004
Chloroform	ND	0.0055	mg/Kg-dry	1	12/4/2004
Chloromethane	ND	0.0055	mg/Kg-dry	1	12/4/2004
Dibromochloromethane	ND	0.0055	mg/Kg-dry	1	12/4/2004
1,1-Dichloroethane	ND	0.0055	mg/Kg-dry	1	12/4/2004
1,2-Dichloroethane	ND	0.0055	mg/Kg-dry	1	12/4/2004
1,1-Dichloroethene	ND	0.0055	mg/Kg-dry	1	12/4/2004
cis-1,2-Dichloroethene	ND	0.0055	mg/Kg-dry	1	12/4/2004
trans-1,2-Dichloroethene	ND	0.0055	mg/Kg-dry	1	12/4/2004
1,2-Dichloropropane	ND	0.0055	mg/Kg-dry	1	12/4/2004
cis-1,3-Dichloropropene	ND	0.0055	mg/Kg-dry	1	12/4/2004
trans-1,3-Dichloropropene	ND	0.0055	mg/Kg-dry	1	12/4/2004
Ethylbenzene	ND	0.0055	mg/Kg-dry	1	12/4/2004
2-Hexanone	ND	0.011	mg/Kg-dry	1	12/4/2004
4-Methyl-2-pentanone	ND	0.011	mg/Kg-dry	1	12/4/2004
Methylene chloride	ND	0.011	mg/Kg-dry	1	12/4/2004
Methyl tert-butyl ether	ND	0.0055	mg/Kg-dry	1	12/4/2004
Styrene	ND	0.0055	mg/Kg-dry	1	12/4/2004
1,1,2,2-Tetrachloroethane	ND	0.0055	mg/Kg-dry	1	12/4/2004
Tetrachloroethene	ND	0.0055	mg/Kg-dry	1	12/4/2004
Toluene	ND	0.0055	mg/Kg-dry	1	12/4/2004
1,1,1-Trichloroethane	ND	0.0055	mg/Kg-dry	1	12/4/2004
1,1,2-Trichloroethane	ND	0.0055	mg/Kg-dry	1	12/4/2004
Trichloroethene	ND	0.0055	mg/Kg-dry	1	12/4/2004
Vinyl chloride	ND	0.0055	mg/Kg-dry	1	12/4/2004
Xylenes, Total	0.024	0.011	mg/Kg-dry	1	12/4/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Page 10 of 12 H - Holding time exceeded

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB51-002

Lab Order: 0412027 **Tag Number:** 18-20'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/1/2004 12:40:00 PM

Lab ID: 0412027-004B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF I	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SW	3580A)	Prep	Date: 12/6/2004	Analyst: JF
TPH (Gasoline)	ND	25	* m	ng/Kg-dry	1	12/7/2004
TPH (Diesel)	ND	25	* m	ng/Kg-dry	1	12/7/2004
TPH (Oil)	30	25	* m	ng/Kg-dry	1	12/7/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550B)	Prep	Date: 12/4/2004	Analyst: VS
Acenaphthene	2.4	0.31	m	ng/Kg-dry	10	12/6/2004
Acenaphthylene	0.47	0.31	m	ng/Kg-dry	10	12/6/2004
Anthracene	2.2	0.31	m	ng/Kg-dry	10	12/6/2004
Benz(a)anthracene	2.3	0.31	m	ng/Kg-dry	10	12/6/2004
Benzo(b)fluoranthene	1.2	0.31	m	ng/Kg-dry	10	12/6/2004
Benzo(k)fluoranthene	1.1	0.31	m	ng/Kg-dry	10	12/6/2004
Benzo(g,h,i)perylene	0.57	0.31	m	ng/Kg-dry	10	12/6/2004
Benzo(a)pyrene	1.7	0.31	m	ng/Kg-dry	10	12/6/2004
Chrysene	2	0.31	m	ng/Kg-dry	10	12/6/2004
Dibenz(a,h)anthracene	0.11	0.031	m	ng/Kg-dry	1	12/6/2004
Fluoranthene	3.7	3.1	m	ng/Kg-dry	100	12/7/2004
Fluorene	2.5	0.31	m	ng/Kg-dry	10	12/6/2004
Indeno(1,2,3-cd)pyrene	0.59	0.31	m	ng/Kg-dry	10	12/6/2004
Naphthalene	6.1	3.1	m	ng/Kg-dry	100	12/7/2004
Phenanthrene	7.6	3.1	m	ng/Kg-dry	100	12/7/2004
Pyrene	4.2	3.1	m	ng/Kg-dry	100	12/7/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW:	3550B)	Prep	Date: 12/4/2004	Analyst: PAE
Bis(2-chloroethoxy)methane	ND	0.41		ng/Kg-dry	1	12/8/2004
Bis(2-chloroethyl)ether	ND	0.41		ng/Kg-dry	1	12/8/2004
Bis(2-ethylhexyl)phthalate	ND	0.41		ng/Kg-dry	1	12/8/2004
4-Bromophenyl phenyl ether	ND	0.41	m	ng/Kg-dry	1	12/8/2004
Butyl benzyl phthalate	ND	0.41	m	ng/Kg-dry	1	12/8/2004
Carbazole	ND	0.41	m	ng/Kg-dry	1	12/8/2004
4-Chloro-3-methylphenol	ND	0.41		ng/Kg-dry	1	12/8/2004
4-Chloroaniline	ND	0.41		ng/Kg-dry	1	12/8/2004
2-Chloronaphthalene	ND	0.41		ng/Kg-dry	1	12/8/2004
2-Chlorophenol	ND	0.41		ng/Kg-dry	1	12/8/2004
4-Chlorophenyl phenyl ether	ND	0.41		ng/Kg-dry	1	12/8/2004
Dibenzofuran	0.82	0.41		ng/Kg-dry	1	12/8/2004
1,2-Dichlorobenzene	ND	0.41		ng/Kg-dry	1	12/8/2004
1,3-Dichlorobenzene	ND	0.41		ng/Kg-dry	1	12/8/2004
1,4-Dichlorobenzene	ND	0.41		ng/Kg-dry	1	12/8/2004
3,3'-Dichlorobenzidine	ND	0.82		ng/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded Page 11

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB51-002

Lab Order: 0412027 **Tag Number:** 18-20'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/1/2004 12:40:00 PM

Lab ID: 0412027-004B **Matrix:** Soil

Analyses	Result	RL (Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW3	550B)	Prep	Date: 12/4/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.41	mg	/Kg-dry	1	12/8/2004
Diethyl phthalate	ND	0.41	mg	/Kg-dry	1	12/8/2004
Dimethyl phthalate	ND	0.41	mg	/Kg-dry	1	12/8/2004
Di-n-butyl phthalate	ND	0.41	mg	/Kg-dry	1	12/8/2004
2,4-Dimethylphenol	ND	0.41	mg	/Kg-dry	1	12/8/2004
4,6-Dinitro-2-methylphenol	ND	2	mg	/Kg-dry	1	12/8/2004
2,4-Dinitrophenol	ND	2	mg	/Kg-dry	1	12/8/2004
2,4-Dinitrotoluene	ND	0.21	mg	/Kg-dry	1	12/8/2004
2,6-Dinitrotoluene	ND	0.21	mg	/Kg-dry	1	12/8/2004
Di-n-octyl phthalate	ND	0.41	mg	/Kg-dry	1	12/8/2004
Hexachlorobenzene	ND	0.41	mg	/Kg-dry	1	12/8/2004
Hexachlorobutadiene	ND	0.41	mg	/Kg-dry	1	12/8/2004
Hexachlorocyclopentadiene	ND	0.41	mg	/Kg-dry	1	12/8/2004
Hexachloroethane	ND	0.41	mg	/Kg-dry	1	12/8/2004
Isophorone	ND	0.41	mg	/Kg-dry	1	12/8/2004
2-Methylnaphthalene	4.5	0.41	mg	/Kg-dry	1	12/8/2004
2-Methylphenol	ND	0.41	mg	/Kg-dry	1	12/8/2004
4-Methylphenol	ND	0.41	mg	/Kg-dry	1	12/8/2004
2-Nitroaniline	ND	2	mg	/Kg-dry	1	12/8/2004
3-Nitroaniline	ND	2	mg	/Kg-dry	1	12/8/2004
4-Nitroaniline	ND	2	mg	/Kg-dry	1	12/8/2004
Nitrobenzene	ND	0.21	mg	/Kg-dry	1	12/8/2004
2-Nitrophenol	ND	0.41	mg	/Kg-dry	1	12/8/2004
4-Nitrophenol	ND	2	mg	/Kg-dry	1	12/8/2004
N-Nitrosodi-n-propylamine	ND	0.21	mg	/Kg-dry	1	12/8/2004
N-Nitrosodiphenylamine	ND	0.41	mg	/Kg-dry	1	12/8/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.41	mg	/Kg-dry	1	12/8/2004
Pentachlorophenol	ND	2	mg	/Kg-dry	1	12/8/2004
Phenol	ND	0.41	mg	/Kg-dry	1	12/8/2004
1,2,4-Trichlorobenzene	ND	0.41	mg	/Kg-dry	1	12/8/2004
2,4,5-Trichlorophenol	ND	0.82	mg	/Kg-dry	1	12/8/2004
2,4,6-Trichlorophenol	ND	0.41	mg	/Kg-dry	1	12/8/2004
Percent Moisture	D2974	ļ.		Prep	Date: 12/1/2004	Analyst: RW
Percent Moisture	20.79	0.01	*	wt%	1	12/2/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

R - RI D outside accepted recovery in

E - Value above quantitation range H - Holding time exceeded

McDonnell States	Request for Chemical Analysis and Chain of Custody Record
neering	· · _
Oak Brook, Illinois 60523 Phone: (630) 990-0300 Fax: (630) 990-0301 Ci	JZIP: Chicago, 16 60012
+ic	~ ~~ ~
set Station	Matrix Of Matrix Sample Sample Sample Depth Sample
Sample R Designator	00 DI
5847	12 M Izlaimosco X
40	$\frac{10}{12} \frac{120 \text{ m}}{155} \frac{1}{\text{M}} \frac{4 \text{ K}}{\text{K}} \frac{\text{M}}{\text{M}} \frac{\text{M}}{\text{M}} = 250$
wss SB51 002	1 2004 18 20 124 X X 4 X X X X X X X X X X X X X X X X
	12-01-04
(a)	Sampler (signature): Custody Seal Number Special Instructions: Dirty Sample W\$5-003-2004-001 Secial Instructions: Dirty Sample W\$5-003-2004-001 Secial Instructions: Dirty Sample W\$5-003-2004-001 Secial Instructions:
Relinquished (Signature): 12/01/04	Received By (signature): Date/Time Ice Present in Content No. N
Relinquished (B) (signature):	Received By (signature): (2) (10-1) (2) (16-1) (2)
	061301 Form WCD-KC1-CH1

Sample Receipt Checklist

Client Name B&M				[Date and	Time	Received:		1	2/1/2004
Nork Order Numbe 0412027				F	Received	by:	JC			
Checklist completed by:	Date Carrier name		T Analys		Reviewed	d by:	Initials		n li olo Date	4
Shipping container/cooler in good condition?		Yes	V	ı	No 🗌		Not Present			
Custody seals intact on shippping container/coo	oler?	Yes			No 🗌		Not Present			
Custody seals intact on sample bottles?	Sici :	Yes			No 🗌		Not Present	✓		
Chain of custody present?		Yes	~		No 🗌					
Chain of custody signed when relinquished and	I received?	Yes			No 🗌					
Chain of custody agrees with sample labels?		Yes			No 🗌					
Samples in proper container/bottle?		Yes			No 🗌					
Sample containers intact?		Yes			No 🗌					
Sufficient sample volume for indicated test?		Yes			No 🗌					
All samples received within holding time?		Yes			No 🗌					
Container or Temp Blank temperature in comp	liance?	Yes			No 🗌		Tempe	erature	3 °C	;
Water - VOA vials have zero headspace?	No VOA vials sub	mitted			Yes	y	No 🗆	ı		
Water - Samples properly preserved/ pH check	ked?	Yes			No 🔳					
	Adjusted?			Checl	ked by					
Any No and/or NA (not applicable) response m	nust be detailed in the	comm	ents sec	ction b	elow.			=	====	
Client contacted	Date contacted:					Perso	on contacted			
Contacted by:	Regarding:									
Comments:										
Corrective Action										
					- A Second					

CLIENT: Burns & McDonnell

Work Order: 0412027

Project: 32088, Willow Street Station- General Iron

Test No: SW5035/8260B Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Date: 15-Dec-04

Sample ID	BR4FBZ	BZMED8	DBFM	DCA12D4	
VBLK120404-2	108	101	98.4	113	
VLCS120404-2	103	100	101	105	
VLCSD120404-2	100	102	100	104	
0412027-002A	85.2	94.3	104	110	
0412027-004A	101	97.8	99.1	104	
0412027-003A	79.1	99.5	101	109	
VBLK120504-2	109	97.1	103	108	
VLCS120504-2	102	99.9	102	97.9	
VLCSD120504-2	102	98.5	103	104	
0412027-003A:50	103	103	106	104	
0412027-001A	89.6	98.0	97.7	99.0	

-Acronym		Surrogate	QC Limits
BR4FBZ	=	4-Bromofluorobenzene	63-110
BZMED8	=	Toluene-d8	85-110
DBFM	=	Dibromofluoromethane	83-119
DCA12D4	=	1,2-Dichloroethane-d4	84-129
		,	

^{*} Surrogate recovery outside acceptance limits

CLIENT: Burns & McDonnell

Work Order: 0412027

Project: 32088, Willow Street Station- General Iron

Test No: SW8270C Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Date: 15-Dec-04

Sample ID	CLPH2D4	DCBZ12D4	NO2BZD5	PH246BR	PH2F	PHD5	PHEN2F	PHEND14
MB-12089-SVOC	73.1	67.0	81.0	82.4	75.3	84.4	69.8	81.7
LCS-12089-SVOC	74.3	69.0	83.7	75.0	78.0	86.6	71.9	80.2
0412056-006BMS	78.2	76.4	91.6	75.6	78.0	86.1	77.8	85.2
0412056-006BMSD	76.8	73.5	89.9	85.0	74.8	84.9	81.2	93.0
0412027-002B	66.0	61.1	77.3	69.4	68.0	77.2	67.2	81.2
0412027-003B	66.8	88.4	78.3	88.4	58.3	77.0	120 *	110
0412027-001B	68.2	63.2	80.9	81.0	63.5	80.1	86.9	96.5
0412027-004B	71.4	66.9	88.1	62.2	66.6	84.8	81.9	77.4

Acronym		Surrogate	QC Limits
CLPH2D4	=	2-Chlorophenol-d4	20-130
DCBZ12D4	=	1,2-Dichlorobenzene-d4	20-130
NO2BZD5	=	Nitrobenzene-d5	23-120
PH246BR	=	2,4,6-Tribromophenol	19-122
PH2F	=	2-Fluorophenol	25-121
PHD5	=	Phenol-d5	24-113
PHEN2F	=	2-Fluorobiphenyl	30-115
PHEND14	=	4-Terphenyl-d14	18-137

^{*} Surrogate recovery outside acceptance limits

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 12/4/2004 9:15:43 A
Prep End Date: 12/4/2004 3:02:26 P

Prep Factor Units:

Prep Batch 12089 Prep Code: 3550_SVOC Technician: JT mL/Kg

Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0412018-001B	Soil		0.03011	0	0	1	33.212	12/4/2004	12/4/2004
0412018-002B	Soil		0.03062	0	0	1	32.658	12/4/2004	12/4/2004
0412018-003B	Soil		0.03061	0	0	1	32.669	12/4/2004	12/4/2004
0412018-004B	Soil		0.03069	0	0	1	32.584	12/4/2004	12/4/2004
0412018-005B	Soil		0.03029	0	0	1	33.014	12/4/2004	12/4/2004
0412018-006B	Soil		0.03043	0	0	1	32.862	12/4/2004	12/4/2004
0412018-007B	Soil		0.03062	0	0	1	32.658	12/4/2004	12/4/2004
0412027-001B	Soil		0.03084	0	0	1	32.425	12/4/2004	12/4/2004
0412027-002B	Soil		0.03055	0	0	1	32.733	12/4/2004	12/4/2004
0412027-003B	Soil		0.03036	0	0	1	32.938	12/4/2004	12/4/2004
0412027-004B	Soil		0.03037	0	0	1	32.927	12/4/2004	12/4/2004
0412056-001B	Soil		0.03074	0	0	1	32.531	12/4/2004	12/4/2004
0412056-002B	Soil		0.03081	0	0	1	32.457	12/4/2004	12/4/2004
0412056-003B	Soil		0.03026	0	0	1	33.047	12/4/2004	12/4/2004
0412056-005B	Soil		0.03028	0	0	1	33.025	12/4/2004	12/4/2004
0412056-006B	Soil		0.03052	0	0	1	32.765	12/4/2004	12/4/2004
0412056-006BMS	Soil		0.03069	0	0	1	32.584	12/4/2004	12/4/2004
0412056-006BMSD	Soil		0.03058	0	0	1	32.701	12/4/2004	12/4/2004
0412056-007B	Soil		0.03021	0	0	1	33.102	12/4/2004	12/4/2004
0412056-008B	Soil		0.03052	0	0	1	32.765	12/4/2004	12/4/2004
LCS-12089-SVOC			0.03	0	0	1	33.333	12/4/2004	12/4/2004
MB-12089-SVOC			0.03	0	0	1	33.333	12/4/2004	12/4/2004

CLIENT: Burns & McDonnell

Work Order: 0412027

Project: 32088, Willow Street Station- General Iron

Test No: SW8270C-SIM Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Date: 15-Dec-04

Sample ID	DCBZ12D4	NO2BZD5	PHEN2F	PHEND14	
MB-12088-PNA	71.3	79.8	79.2	88.8	
LCS-12088-PNA	66.1	80.2	75.8	94.6	
0412056-003BMS	70.3	86.4	80.2	96.8	
0412056-003BMSD	70.5	90.0	85.0	101	
0412027-003B	52.6	77.8	76.1	86.3	
0412027-002B	64.0	78.9	59.7	62.1	
0412027-004B	67.3	86.6	59.1	52.0	
0412027-001B	65.1	82.4	91.4	82.4	

Acronym		Surrogate	QC Limits
DCBZ12D4 NO2BZD5 PHEN2F PHEND14	=	1,2-Dichlorobenzene-d4 Nitrobenzene-d5 2-Fluorobiphenyl 4-Terphenyl-d14	20-130 23-120 30-115 18-137

^{*} Surrogate recovery outside acceptance limits

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 12/4/2004 9:10:34 A
Prep End Date: 12/4/2004 3:02:32 P

Prep Factor Units:

Prep Batch 12088 Prep Code: 3550_PNA Technician: JT mL/Kg

Sample ID	Matrix	pH SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0412018-001B	Soil	0.03011	0	0	1	33.212	12/4/2004	12/4/2004
0412018-002B	Soil	0.03062	0	0	1	32.658	12/4/2004	12/4/2004
0412018-003B	Soil	0.03061	0	0	1	32.669	12/4/2004	12/4/2004
0412018-004B	Soil	0.03069	0	0	1	32.584	12/4/2004	12/4/2004
0412018-005B	Soil	0.03029	0	0	1	33.014	12/4/2004	12/4/2004
0412018-006B	Soil	0.03043	0	0	1	32.862	12/4/2004	12/4/2004
0412018-007B	Soil	0.03062	0	0	1	32.658	12/4/2004	12/4/2004
0412027-001B	Soil	0.03084	0	0	1	32.425	12/4/2004	12/4/2004
0412027-002B	Soil	0.03055	0	0	1	32.733	12/4/2004	12/4/2004
0412027-003B	Soil	0.03036	0	0	1	32.938	12/4/2004	12/4/2004
0412027-004B	Soil	0.03037	0	0	1	32.927	12/4/2004	12/4/2004
0412056-001B	Soil	0.03074	0	0	1	32.531	12/4/2004	12/4/2004
0412056-002B	Soil	0.03081	0	0	1	32.457	12/4/2004	12/4/2004
0412056-003B	Soil	0.03026	0	0	1	33.047	12/4/2004	12/4/2004
0412056-003BMS	Soil	0.03058	0	0	1	32.701	12/4/2004	12/4/2004
0412056-003BMSD	Soil	0.0303	0	0	1	33.003	12/4/2004	12/4/2004
0412056-005B	Soil	0.03028	0	0	1	33.025	12/4/2004	12/4/2004
0412056-006B	Soil	0.03052	0	0	1	32.765	12/4/2004	12/4/2004
0412056-007B	Soil	0.03021	0	0	1	33.102	12/4/2004	12/4/2004
0412056-008B	Soil	0.03052	0	0	1	32.765	12/4/2004	12/4/2004
LCS-12088-PNA		0.03	0	0	1	33.333	12/4/2004	12/4/2004
MB-12088-PNA		0.03	0	0	1	33.333	12/4/2004	12/4/2004

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 12/6/2004 8:47:59 P

Prep End Date:

Prep Factor Units:

Prep Batch 12118 Prep Code: 3580_TPH Technician: CDC mL/Kg

Trop Baton 1211		, odo.		Official II. ODG					
Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0412018-001B	Soil		0.00513	0	0	5	974.659	12/6/2004	12/7/2004
0412018-002B	Soil		0.00515	0	0	5	970.874	12/6/2004	12/7/2004
0412018-002BMS	Soil		0.00521	0	0	5	959.693	12/6/2004	12/7/2004
0412018-002BMSD	Soil		0.00503	0	0	5	994.036	12/6/2004	12/7/2004
0412018-003B	Soil		0.00523	0	0	5	956.023	12/6/2004	12/7/2004
0412018-004B	Soil		0.00545	0	0	5	917.431	12/6/2004	12/7/2004
0412018-005B	Soil		0.00539	0	0	5	927.644	12/6/2004	12/7/2004
0412018-006B	Soil		0.00518	0	0	5	965.251	12/6/2004	12/7/2004
0412018-007B	Soil		0.00522	0	0	5	957.854	12/6/2004	12/7/2004
0412027-001B	Soil		0.00519	0	0	5	963.391	12/6/2004	12/7/2004
0412027-002B	Soil		0.00513	0	0	5	974.659	12/6/2004	12/7/2004
0412027-003B	Soil		0.00511	0	0	5	978.474	12/6/2004	12/7/2004
0412027-004B	Soil		0.00504	0	0	5	992.063	12/6/2004	12/7/2004
0412102-006B	Soil		0.00525	0	0	5	952.381	12/7/2004	12/8/2004
0412102-024B	Soil		0.00506	0	0	5	988.142	12/7/2004	12/8/2004
0412102-026B	Soil		0.00514	0	0	5	972.763	12/7/2004	12/8/2004
0412134-001A	Soil		0.0054	0	0	5	925.926	12/6/2004	12/7/2004
0412138-001B	Soil		0.00534	0	0	5	936.330	12/7/2004	12/8/2004
LCS-12118-TPH			0.005	0	0	5	1000.000	12/6/2004	12/7/2004
MB-12118-TPH			0.005	0	0	5	1000.000	12/6/2004	12/7/2004

Date: *December 15, 2004*

CLIENT: Burns & McDonnell

Work Order: 0412027

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12118

Sample ID MB-12118-TPH	SampType:	MBLK	TestCoo	le: TPH	Units: mg/Kg		Prep Date	e: 12/6/2 0	004	Run ID: GC	-FID_04120	7A
Client ID: ZZZZZ	Batch ID:	12118	TestN	o: SW8015N	1		Analysis Date	e: 12/7/2 0	004	SeqNo: 31	9478	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		ND	20									*
TPH (Diesel)		ND	20									*
TPH (Oil)		ND	20									*
Sample ID LCS-12118-TPH	SampType:	LCS	TestCoo	le: TPH	Units: mg/Kg		Prep Date	e: 12/6/2 0	004	Run ID: GC	-FID_04120	7A
Client ID: ZZZZZ	Batch ID:	12118	TestN	lo: SW8015N	1		Analysis Date	e: 12/7/2	004	SeqNo: 31	9479	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		178.4	20	200	0	89.2	30	150	0	0		*
TPH (Diesel)		244.7	20	200	0	122	30	150	0	0		*
TPH (Oil)		287.6	20	200	0	144	30	150	0	0		*
Sample ID 0412018-002BMS	SampType:	MS	TestCoo	le: TPH	Units: mg/Kg	-dry	Prep Date	e: 12/6/2 0	004	Run ID: GC	-FID_04120	7A
Client ID: ZZZZZ	Batch ID:	12118	TestN	o: SW8015N	1		Analysis Date	e: 12/8/2 0	004	SeqNo: 31	9491	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		254.4	23	350.4	5.641	71	30	150	0	0		*
TPH (Diesel)		379.4	23	350.4	4.202	107	30	150	0	0		*
TPH (Oil)		464.9	23	350.4	16.57	128	30	150	0	0		*
Sample ID 0412018-002BMSD	SampType:	MSD	TestCoo	le: TPH	Units: mg/Kg	-dry	Prep Date	e: 12/6/2 0	004	Run ID: GC	-FID_04120	7A
Client ID: ZZZZZ	Batch ID:	12118	TestN	lo: SW8015N	1		Analysis Date	e: 12/8/2 0	004	SeqNo: 31	9492	
				001/	SPK Ref Val	%REC	LowLimit	Highl imit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte		Result	PQL	SPK value	SPK Kei vai	70KEC	LOWLIIII				THE DELITIE	-,
Analyte TPH (Gasoline)		Result 247.5	PQL 24	362.9	5.641	66.6	30	150	254.4	2.76	25	*
•												

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order:

0412027

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12088

Sample ID MB-12088-PNA	SampType: MBLK		de: PNA_SOII			•	e: 12/4/20		Run ID: SV		05A
Client ID: ZZZZZ	Batch ID: 12088	TestN	lo: SW8270C	-SI		Analysis Dat	e: 12/5/2 0	004	SeqNo: 317	7931	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.025									
Acenaphthylene	ND	0.025									
Anthracene	ND	0.025									
Benz(a)anthracene	ND	0.025									
Benzo(a)pyrene	ND	0.025									
Benzo(b)fluoranthene	ND	0.025									
Benzo(g,h,i)perylene	ND	0.025									
Benzo(k)fluoranthene	ND	0.025									
Chrysene	ND	0.025									
Dibenz(a,h)anthracene	ND	0.025									
Fluoranthene	ND	0.025									
Fluorene	ND	0.025									
Indeno(1,2,3-cd)pyrene	ND	0.025									
Naphthalene	ND	0.025									
Phenanthrene	ND	0.025									
Pyrene	ND	0.025									
Sample ID LCS-12088-PNA	SampType: LCS	TestCoo	de: PNA_SOII	Units: mg/Kg		Prep Date	e: 12/4/2 0	004	Run ID: SV	OC-3_0412	05A
Client ID: ZZZZZ	Batch ID: 12088	TestN	lo: SW8270C	-SI		Analysis Dat	e: 12/5/2 0	004	SeqNo: 317	7932	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.1157	0.025	0.167	0	69.3	30	130	0	0		
Acenaphthylene	0.1163	0.025	0.167	0	69.7	30	130	0	0		
Anthracene	0.1237	0.025	0.167	0	74.1	30	130	0	0		
Benz(a)anthracene	0.1427	0.025	0.167	0	85.4	30	130	0	0		
Benzo(a)pyrene	0.1447	0.025	0.167	0	86.6	30	130	0	0		
Benzo(b)fluoranthene	0.1613	0.025	0.167	0	96.6	30	130	0	0		
Benzo(g,h,i)perylene	0.1517	0.025	0.167	0	90.8	30	130	0	0		
	0.400	0.025	0.167	0	79	30	130	0	0		
Benzo(k)fluoranthene	0.132										
Benzo(k)fluoranthene Chrysene	0.132	0.025	0.167	0	82.6	30	130	0	0		

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order:

0412027

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12088

Sample ID LCS-12088-PNA	SampType: LCS		de: PNA_SOI			Prep Date				OC-3_0412	05A
Client ID: ZZZZZ	Batch ID: 12088	TestN	lo: SW8270C	-SI		Analysis Dat	e: 12/5/20	004	SeqNo: 31	7932	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoranthene	0.1387	0.025	0.167	0	83	30	130	0	0		
Fluorene	0.1283	0.025	0.167	0	76.8	30	130	0	0		
Indeno(1,2,3-cd)pyrene	0.152	0.025	0.167	0	91	30	130	0	0		
Naphthalene	0.1073	0.025	0.167	0	64.3	30	130	0	0		
Phenanthrene	0.1263	0.025	0.167	0	75.6	30	130	0	0		
Pyrene	0.1337	0.025	0.167	0	80	30	130	0	0		
Sample ID 0412056-003BMS SampType: MS TestCode: PNA_SOIL Units: mg/Kg-dry Prep				Prep Date: 12/4/2004			Run ID: SVOC-3_041206A				
Client ID: ZZZZZ	Batch ID: 12088	TestN	lo: SW8270C	-SI		Analysis Dat	e: 12/6/2 0	004	SeqNo: 31	8718	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.1521	0.030	0.2032	0	74.9	30	130	0	0		
Acenaphthylene	0.1546	0.030	0.2032	0	76	30	130	0	0		
Anthracene	0.1582	0.030	0.2032	0	77.8	30	130	0	0		
Benz(a)anthracene	0.1846	0.030	0.2032	0	90.8	30	130	0	0		
Benzo(a)pyrene	0.1911	0.030	0.2032	0	94	30	130	0	0		
Benzo(b)fluoranthene	0.1907	0.030	0.2032	0	93.8	30	130	0	0		
Benzo(g,h,i)perylene	0.202	0.030	0.2032	0	99.4	30	130	0	0		
Benzo(k)fluoranthene	0.1911	0.030	0.2032	0	94	30	130	0	0		
Chrysene	0.1801	0.030	0.2032	0	88.6	30	130	0	0		
Dibenz(a,h)anthracene	0.2049	0.030	0.2032	0	101	30	130	0	0		
Fluoranthene	0.1834	0.030	0.2032	0.01394	83.4	30	130	0	0		
Fluorene	0.1675	0.030	0.2032	0	82.4	30	130	0	0		
Indeno(1,2,3-cd)pyrene	0.2016	0.030	0.2032	0	99.2	30	130	0	0		
Naphthalene	0.1412	0.030	0.2032	0	69.5	30	130	0	0		
Phenanthrene	0.1675	0.030	0.2032	0.01927	73	30	130	0	0		
Pyrene	0.1761	0.030	0.2032	0.01066	81.4	30	130	0	0		

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order:

Project:

0412027

32088, Willow Street Station-General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12088

Sample ID 0412056-003BMSD	SampType: MSD	TestCod	de: PNA_SOII	_ Units: mg/	Kg-dry	Prep Dat	e: 12/4/2 0	004	Run ID: SV	OC-3_04120	6A
Client ID: ZZZZZ	Batch ID: 12088	TestN	lo: SW8270C	-SI		Analysis Da	te: 12/6/2 0	004	SeqNo: 318	8719	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.1642	0.031	0.2051	0	80	30	130	0.1521	7.62	50	
Acenaphthylene	0.1646	0.031	0.2051	0	80.2	30	130	0.1546	6.28	50	
Anthracene	0.172	0.031	0.2051	0	83.8	30	130	0.1582	8.33	50	
Benz(a)anthracene	0.1871	0.031	0.2051	0	91.2	30	130	0.1846	1.36	50	
Benzo(a)pyrene	0.1904	0.031	0.2051	0	92.8	30	130	0.1911	0.362	50	
Benzo(b)fluoranthene	0.1928	0.031	0.2051	0	94	30	130	0.1907	1.13	50	
Benzo(g,h,i)perylene	0.2047	0.031	0.2051	0	99.8	30	130	0.202	1.32	50	
Benzo(k)fluoranthene	0.1924	0.031	0.2051	0	93.8	30	130	0.1911	0.707	50	
Chrysene	0.1822	0.031	0.2051	0	88.8	30	130	0.1801	1.14	50	
Dibenz(a,h)anthracene	0.2084	0.031	0.2051	0	102	30	130	0.2049	1.71	50	
Fluoranthene	0.1908	0.031	0.2051	0.01394	86.2	30	130	0.1834	3.97	50	
Fluorene	0.1838	0.031	0.2051	0	89.6	30	130	0.1675	9.27	50	
Indeno(1,2,3-cd)pyrene	0.2051	0.031	0.2051	0	100	30	130	0.2016	1.72	50	
Naphthalene	0.147	0.031	0.2051	0	71.7	30	130	0.1412	4.03	50	
Phenanthrene	0.1789	0.031	0.2051	0.01927	77.8	30	130	0.1675	6.57	50	
Pyrene	0.181	0.031	0.2051	0.01066	83	30	130	0.1761	2.75	50	

ND - Not Detected at the Reporting Limit

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^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

Work Order: 0412027

ANALYTICAL QC SUMMARY REPORT

Project: 32088, Willow Street Station- General Iron

BatchID: 12089

Sample ID MB-12089-SVOC	SampType: MBLK	TestCode: SVOC_SOIL Units: mg/Kg Prep Date: 12	74/2004 Run ID: SVOC-2_041205A
Client ID: ZZZZZ	Batch ID: 12089	TestNo: SW8270C Analysis Date: 12	75/2004 SeqNo: 318036
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLi	
			THE TO THE VAI JUST A PERIOD QUAI
1,2,4-Trichlorobenzene	ND	0.17	
1,2-Dichlorobenzene	ND	0.17	
1,3-Dichlorobenzene	ND	0.17	
1,4-Dichlorobenzene	ND	0.17	
2, 2'-oxybis(1-Chloropropane)	ND	0.17	
2,4,5-Trichlorophenol	ND	0.33	
2,4,6-Trichlorophenol	ND	0.17	
2,4-Dichlorophenol	ND	0.17	
2,4-Dimethylphenol	ND	0.17	
2,4-Dinitrophenol	ND	0.80	
2,4-Dinitrotoluene	ND	0.17	
2,6-Dinitrotoluene	ND	0.17	
2-Chloronaphthalene	ND	0.17	
2-Chlorophenol	ND	0.17	
2-Methylnaphthalene	ND	0.17	
2-Methylphenol	ND	0.17	
2-Nitroaniline	ND	0.80	
2-Nitrophenol	ND	0.17	
3,3´-Dichlorobenzidine	ND	0.33	
3-Nitroaniline	ND	0.80	
4,6-Dinitro-2-methylphenol	ND	0.80	
4-Bromophenyl phenyl ether	ND	0.17	
4-Chloro-3-methylphenol	ND	0.17	
4-Chloroaniline	ND	0.17	
4-Chlorophenyl phenyl ether	ND	0.17	
4-Methylphenol	ND	0.17	
4-Nitroaniline	ND	0.80	
4-Nitrophenol	ND	0.80	
Acenaphthene	ND	0.17	
Acenaphthylene	ND	0.17	
Aniline	ND	0.17	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

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R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order:

Project:

0412027

ANALYTICAL QC SUMMARY REPORT

BatchID: 12089

32088, Willow Street Station- General Iron

Sample ID MB-12089-SVOC	SampType: MBLK	TestCode: SVOC_SOIL Ur	nits: mg/Kg Prep Date:	12/4/2004 Run ID	SVOC-2_041205A
-------------------------	----------------	------------------------	-------------------------------	-------------------------	----------------

Client ID: ZZZZZ	Batch ID: 12089	TestN	o: SW8270C	;		Analysis Da	ate: 12/5/2	004	SeqNo: 31	8036	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	ND	0.17									
Benz(a)anthracene	ND	0.17									
Benzidine	ND	0.17									
Benzo(a)pyrene	ND	0.17									
Benzo(b)fluoranthene	ND	0.17									
Benzo(g,h,i)perylene	ND	0.17									
Benzo(k)fluoranthene	ND	0.17									
Benzoic acid	ND	0.80									
Benzyl alcohol	ND	0.17									
Bis(2-chloroethoxy)methane	ND	0.17									
Bis(2-chloroethyl)ether	ND	0.17									
Bis(2-ethylhexyl)phthalate	ND	0.17									
Butyl benzyl phthalate	ND	0.17									
Carbazole	ND	0.17									
Chrysene	ND	0.17									
Di-n-butyl phthalate	ND	0.17									
Di-n-octyl phthalate	ND	0.17									
Dibenz(a,h)anthracene	ND	0.17									
Dibenzofuran	ND	0.17									
Diethyl phthalate	ND	0.17									
Dimethyl phthalate	ND	0.17									
Fluoranthene	ND	0.17									
Fluorene	ND	0.17									
Hexachlorobenzene	ND	0.17									
Hexachlorobutadiene	ND	0.17									
Hexachlorocyclopentadiene	ND	0.17									
Hexachloroethane	ND	0.17									
Indeno(1,2,3-cd)pyrene	ND	0.17									
Isophorone	ND	0.17									
N-Nitrosodi-n-propylamine	ND	0.17									
N-Nitrosodimethylamine	ND	0.17									

Qualifiers:

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R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Page 6 of 17

Work Order: 0412027

ANALYTICAL QC SUMMARY REPORT

BatchID: 12089

Project: 32088, Willow Street Station- General Iron

Sample ID MB-12089-SVOC Client ID: ZZZZZ	SampType: MBLK Batch ID: 12089		e: SVOC_SC o: SW8270C	OIL Units: mg/K	•	Prep Date Analysis Date			Run ID: SN SeqNo: 31	/OC-2_0412 8036	05A
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
N-Nitrosodiphenylamine	ND	0.17									
Naphthalene	ND	0.17									
Nitrobenzene	ND	0.17									
Pentachlorophenol	ND	0.80									
Phenanthrene	ND	0.17									
Phenol	ND	0.17									
Pyrene	ND	0.17									
Pyridine	ND	0.17									
Sample ID LCS-12089-SVOC	SampType: LCS	TestCod	e: SVOC_S C	OIL Units: mg/K	g	Prep Date	e: 12/4/20	004	Run ID: SV	/OC-2_0412	05A
Client ID: ZZZZZ	Batch ID: 12089	TestN	o: SW8270C			Analysis Date	e: 12/5/2 0	004	SeqNo: 31	8037	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	1.204	0.17	1.667	0	72.2	55	106	0	0		
1,4-Dichlorobenzene	1.149	0.17	1.667	0	68.9	55	90	0	0		
2,4-Dinitrotoluene	1.307	0.17	1.667	0	78.4	55	101	0	0		
2-Chlorophenol	2.424	0.17	3.333	0	72.7	61	91	0	0		
4-Chloro-3-methylphenol	2.869	0.17	3.333	0	86.1	62	100	0	0		
4-Nitrophenol	2.909	0.80	3.333	0	87.3	53	123	0	0		
Acenaphthene	1.306	0.17	1.667	0	78.4	65	101	0	0		
N-Nitrosodi-n-propylamine	1.494	0.17	1.667	0	89.6	55	100	0	0		
Pentachlorophenol	2.87	0.80	3.333	0	86.1	40	120	0	0		
Phenol	2.927	0.17	3.333	0	87.8	60	91	0	0		
Pyrene	1.317	0.17	1.667	0	79	50	131	0	0		
Sample ID 0412056-006BMS	SampType: MS	TestCod	e: SVOC_S C	OIL Units: mg/k	(g-dry	Prep Date	: 12/4/2	004	Run ID: SV	/OC-2_0412	05A
Client ID: ZZZZZ	Batch ID: 12089	TestN	o: SW8270C			Analysis Date	e: 12/5/2 0	004	SeqNo: 31	8043	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	1.725	0.21	2.102	0	82	55	106	0	0		
1,4-Dichlorobenzene	1.671	0.21	2.102	0	79.5	55	90	0	0		

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Work Order: 0412027

Project:

32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12089

Sample ID 0412056-006BMS Client ID: ZZZZZ	SampType: MS Batch ID: 12089		de: SVOC_SC	· ·	•	Prep Dat Analysis Da			Run ID: SV SeqNo: 318	OC-2_04120)5A
Analyte	Result	PQL		SPK Ref Val	%REC	LowLimit		RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dinitrotoluene	1.845	0.21	2.102	0	87.8	55	101	0	0		
2-Chlorophenol	3.319	0.21	4.203	0	78.9	61	91	0	0		
4-Chloro-3-methylphenol	3.541	0.21	4.203	0	84.2	62	100	0	0		
4-Nitrophenol	3.775	1.0	4.203	0	89.8	53	123	0	0		
Acenaphthene	1.754	0.21	2.102	0	83.4	65	101	0	0		
N-Nitrosodi-n-propylamine	2.079	0.21	2.102	0	98.9	55	100	0	0		
Pentachlorophenol	3.67	1.0	4.203	0	87.3	40	120	0	0		
Phenol	3.741	0.21	4.203	0	89	60	91	0	0		
Pyrene	1.89	0.21	2.102	0	89.9	50	131	0	0		
Sample ID 0412056-006BMSD	SampType: MSD	TestCo	de: SVOC_SC	IL Units: mg/l	Kg-dry	Prep Dat	e: 12/4/2 0	004	Run ID: SV	OC-2_04120)5A
Client ID: ZZZZZ	Batch ID: 12089	TestN	lo: SW8270C			Analysis Da	te: 12/5/2 0	004	SeqNo: 318	8044	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	I owl imit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
					701 KEO		3				
1,2,4-Trichlorobenzene	1.72	0.22	2.11	0	81.5	55	106	1.725	0.277	23	
, ,		0.22 0.22	2.11 2.11	0				1.725 1.671	0.277 4.51	23 27	
1,4-Dichlorobenzene	1.72	-		_	81.5	55	106	_	_	_	
1,4-Dichlorobenzene 2,4-Dinitrotoluene	1.72 1.597	0.22	2.11	0	81.5 75.7	55 55	106 90	1.671	4.51	27	
1,2,4-Trichlorobenzene 1,4-Dichlorobenzene 2,4-Dinitrotoluene 2-Chlorophenol 4-Chloro-3-methylphenol	1.72 1.597 2.046	0.22 0.22	2.11 2.11	0	81.5 75.7 97	55 55 55	106 90 101	1.671 1.845	4.51 10.3	27 47	
1,4-Dichlorobenzene 2,4-Dinitrotoluene 2-Chlorophenol 4-Chloro-3-methylphenol	1.72 1.597 2.046 3.264	0.22 0.22 0.22	2.11 2.11 4.219	0 0 0	81.5 75.7 97 77.4	55 55 55 61	106 90 101 91	1.671 1.845 3.319	4.51 10.3 1.66	27 47 50	
1,4-Dichlorobenzene 2,4-Dinitrotoluene 2-Chlorophenol 4-Chloro-3-methylphenol 4-Nitrophenol	1.72 1.597 2.046 3.264 3.976	0.22 0.22 0.22 0.22	2.11 2.11 4.219 4.219	0 0 0 0	81.5 75.7 97 77.4 94.2	55 55 55 61 62	106 90 101 91 100	1.671 1.845 3.319 3.541	4.51 10.3 1.66 11.6	27 47 50 33	
1,4-Dichlorobenzene 2,4-Dinitrotoluene 2-Chlorophenol	1.72 1.597 2.046 3.264 3.976 4.233	0.22 0.22 0.22 0.22 1.0	2.11 2.11 4.219 4.219 4.219	0 0 0 0	81.5 75.7 97 77.4 94.2 100	55 55 55 61 62 53	106 90 101 91 100 123	1.671 1.845 3.319 3.541 3.775	4.51 10.3 1.66 11.6 11.4	27 47 50 33 50	S
1,4-Dichlorobenzene 2,4-Dinitrotoluene 2-Chlorophenol 4-Chloro-3-methylphenol 4-Nitrophenol Acenaphthene	1.72 1.597 2.046 3.264 3.976 4.233 1.87	0.22 0.22 0.22 0.22 1.0 0.22	2.11 2.11 4.219 4.219 4.219 2.11	0 0 0 0 0	81.5 75.7 97 77.4 94.2 100 88.6	55 55 55 61 62 53 65	106 90 101 91 100 123 101	1.671 1.845 3.319 3.541 3.775 1.754	4.51 10.3 1.66 11.6 11.4 6.40	27 47 50 33 50	S
1,4-Dichlorobenzene 2,4-Dinitrotoluene 2-Chlorophenol 4-Chloro-3-methylphenol 4-Nitrophenol Acenaphthene N-Nitrosodi-n-propylamine	1.72 1.597 2.046 3.264 3.976 4.233 1.87 2.177	0.22 0.22 0.22 0.22 1.0 0.22 0.22	2.11 2.11 4.219 4.219 4.219 2.11 2.11	0 0 0 0 0 0	81.5 75.7 97 77.4 94.2 100 88.6 103	55 55 55 61 62 53 65 55	106 90 101 91 100 123 101	1.671 1.845 3.319 3.541 3.775 1.754 2.079	4.51 10.3 1.66 11.6 11.4 6.40 4.61	27 47 50 33 50 19 38	S

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Work Order:

0412027

ANALYTICAL QC SUMMARY REPORT

BatchID: R15505

Project: 32088, Willow Street Station- General Iron

Sample ID VBLK120404-2	SampType: MBLK	TestCode:	VOC_ENC	OR Units: mg/Kg		Prep Da	te:		Run ID: V	OA-2_041204	4A
Client ID: ZZZZZ	Batch ID: R15505	TestNo:	SW5035/82	260		Analysis Da	ite: 12/4/2	004	SeqNo: 31	7835	
Analyte	Result	PQL S	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.0050									
1,1,2,2-Tetrachloroethane	ND ND	0.0050									
1,1,2-Trichloroethane	ND	0.0050									
1,1-Dichloroethane	ND ND	0.0050									
1,1-Dichloroethene	ND ND	0.0050									
1,2-Dichloroethane	ND	0.0050									
1,2-Dichloropropane	ND	0.0050									
2-Butanone	ND	0.010									
2-Hexanone	ND	0.010									
4-Methyl-2-pentanone	ND	0.010									
Acetone	ND	0.025									
Benzene	ND	0.0050									
Bromodichloromethane	ND	0.0050									
Bromoform	ND	0.0050									
Bromomethane	ND	0.010									
Carbon disulfide	ND	0.0050									
Carbon tetrachloride	ND	0.0050									
Chlorobenzene	ND	0.0050									
Chloroethane	ND	0.010									
Chloroform	ND	0.0050									
Chloromethane	ND	0.010									
cis-1,2-Dichloroethene	ND	0.0050									
cis-1,3-Dichloropropene	ND	0.0050									
Dibromochloromethane	ND	0.0050									
Ethylbenzene	ND	0.0050									
Methyl tert-butyl ether	ND	0.0050									
Methylene chloride	0.00263	0.010									J
Styrene	ND	0.0050									
Tetrachloroethene	ND	0.0050									
Toluene	ND	0.0050									
trans-1,2-Dichloroethene	ND	0.0050									

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Page 9 of 17

Work Order: 0412027

Project:

ANALYTICAL QC SUMMARY REPORT

32088, Willow Street Station- General Iron

BatchID: R15505

Sample ID VBLK120404-2 Client ID: ZZZZZ	SampType: MBLK Batch ID: R15505		de: VOC_ENC	COR Units: mg/Kg		Prep Dat Analysis Da		004	Run ID: VC SeqNo: 31	0A-2_041204 7835	4A
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	0.0050									
Trichloroethene	ND	0.0050									
Vinyl chloride	ND	0.0050									
Xylenes, Total	ND	0.010									

Client ID: ZZZZZ	11204A
1,1,1-Trichloroethane	
1,1,2,2-Tetrachloroethane 0.04472 0.0050 0.05 0 89.4 70 130 0 0 1,1,2-Trichloroethane 0.04713 0.0050 0.05 0 94.3 70 130 0 0 1,1-Dichloroethane 0.04801 0.0050 0.05 0 93.2 70 130 0 0 1,2-Dichloroethane 0.04801 0.0050 0.05 0 96 70 130 0 0 1,2-Dichloroethane 0.0467 0.0050 0.05 0 93.4 70 130 0 0 1,2-Dichloropropane 0.04582 0.0050 0.05 0 91.6 70 130 0 0 2-Butanone 0.04905 0.010 0.05 0 98.1 70 130 0 0 2-Hexanone 0.04717 0.010 0.05 0 94.3 70 130 0 0 4-Methyl-2-pentanone 0.04825 0.	imit Qual
1,1,2-Trichloroethane 0.04713 0.0050 0.05 0 94.3 70 130 0 0 1,1-Dichloroethane 0.04661 0.0050 0.05 0 93.2 70 130 0 0 1,1-Dichloroethane 0.04801 0.0050 0.05 0 96 70 130 0 0 1,2-Dichloroethane 0.0467 0.0050 0.05 0 93.4 70 130 0 0 1,2-Dichloropropane 0.04582 0.0050 0.05 0 91.6 70 130 0 0 2-Butanone 0.04905 0.010 0.05 0 98.1 70 130 0 0 2-Hexanone 0.04905 0.010 0.05 0 94.3 70 130 0 0 4-Methyl-2-pentanone 0.04825 0.010 0.05 0 96.5 70 130 0 0 Acetone 0.05607 0.025 <t< td=""><td></td></t<>	
1,1-Dichloroethane 0.04661 0.0050 0.05 0 93.2 70 130 0 0 1,1-Dichloroethene 0.04801 0.0050 0.05 0 96 70 130 0 0 1,2-Dichloroethane 0.0467 0.0050 0.05 0 93.4 70 130 0 0 1,2-Dichloropropane 0.04582 0.0050 0.05 0 91.6 70 130 0 0 2-Butanone 0.04905 0.010 0.05 0 98.1 70 130 0 0 2-Hexanone 0.04717 0.010 0.05 0 94.3 70 130 0 0 4-Methyl-2-pentanone 0.04825 0.010 0.05 0 96.5 70 130 0 0 Acetone 0.05607 0.025 0.05 0 97 70 130 0 0 Benzene 0.04825 0.005 0.05	
1,1-Dichloroethene 0.04801 0.0050 0.05 0 96 70 130 0 0 1,2-Dichloroethane 0.0467 0.0050 0.05 0 93.4 70 130 0 0 1,2-Dichloropropane 0.04582 0.0050 0.05 0 91.6 70 130 0 0 2-Butanone 0.04905 0.010 0.05 0 98.1 70 130 0 0 2-Hexanone 0.04717 0.010 0.05 0 94.3 70 130 0 0 4-Methyl-2-pentanone 0.04825 0.010 0.05 0 96.5 70 130 0 0 Acetone 0.05607 0.025 0.05 0 96.5 70 130 0 0 Benzene 0.04851 0.0050 0.05 0 97 70 130 0 0 Bromoform 0.04642 0.0050 0.05 0	
1,2-Dichloroethane 0.0467 0.0050 0.05 0 93.4 70 130 0 0 1,2-Dichloropropane 0.04582 0.0050 0.05 0 91.6 70 130 0 0 2-Butanone 0.04905 0.010 0.05 0 98.1 70 130 0 0 2-Hexanone 0.04717 0.010 0.05 0 94.3 70 130 0 0 4-Methyl-2-pentanone 0.04825 0.010 0.05 0 96.5 70 130 0 0 Acetone 0.05607 0.025 0.05 0 96.5 70 130 0 0 Benzene 0.04851 0.0050 0.05 0 97 70 130 0 0 Bromodichloromethane 0.04931 0.0050 0.05 0 87.8 70 130 0 0 Bromoform 0.04642 0.0050 0.05 <	
1,2-Dichloropropane 0.04582 0.0050 0.05 0 91.6 70 130 0 0 2-Butanone 0.04905 0.010 0.05 0 98.1 70 130 0 0 2-Hexanone 0.04717 0.010 0.05 0 94.3 70 130 0 0 4-Methyl-2-pentanone 0.04825 0.010 0.05 0 96.5 70 130 0 0 Acetone 0.05607 0.025 0.05 0 112 50 150 0 0 Benzene 0.04851 0.0050 0.05 0 97 70 130 0 0 Bromodichloromethane 0.04391 0.0050 0.05 0 87.8 70 130 0 0 Bromoform 0.04642 0.0050 0.05 0 92.8 70 130 0 0 Carbon disulfide 0.06304 0.0050 0.05 <td< td=""><td></td></td<>	
2-Butanone 0.04905 0.010 0.05 0 98.1 70 130 0 0 2-Hexanone 0.04717 0.010 0.05 0 94.3 70 130 0 0 4-Methyl-2-pentanone 0.04825 0.010 0.05 0 96.5 70 130 0 0 Acetone 0.05607 0.025 0.05 0 112 50 150 0 0 Benzene 0.04851 0.0050 0.05 0 97 70 130 0 0 Bromodichloromethane 0.04391 0.0050 0.05 0 87.8 70 130 0 0 Bromoform 0.04642 0.0050 0.05 0 87.8 70 130 0 0 Bromomethane 0.03593 0.010 0.05 0 92.8 70 130 0 0 Carbon disulfide 0.06304 0.0050 0.05 0 126 70 130 0 0 Carbon tetrachloride 0.04955 0.0050 0.05 0 99.1 70 130 0 0 Chlorobenzene 0.04974 0.0050 0.05 0 99.5 70 130 0 0 Chlorothane 0.04898 0.010 0.05 0 99.5 70 130 0 0	
2-Hexanone 0.04717 0.010 0.05 0 94.3 70 130 0 0 4-Methyl-2-pentanone 0.04825 0.010 0.05 0 96.5 70 130 0 0 Acetone 0.05607 0.025 0.05 0 112 50 150 0 0 Benzene 0.04851 0.0050 0.05 0 97 70 130 0 0 Bromodichloromethane 0.04391 0.0050 0.05 0 87.8 70 130 0 0 Bromoform 0.04642 0.0050 0.05 0 92.8 70 130 0 0 Bromomethane 0.03593 0.010 0.05 0 71.9 70 130 0 0 Carbon disulfide 0.06304 0.0050 0.05 0 126 70 130 0 0 Chlorobenzene 0.04974 0.0050 0.05 0 <td></td>	
4-Methyl-2-pentanone 0.04825 0.010 0.05 0 96.5 70 130 0 0 Acetone 0.05607 0.025 0.05 0 112 50 150 0 0 Benzene 0.04851 0.0050 0.05 0 97 70 130 0 0 Bromodichloromethane 0.04391 0.0050 0.05 0 87.8 70 130 0 0 Bromoform 0.04642 0.0050 0.05 0 92.8 70 130 0 0 Bromomethane 0.03593 0.010 0.05 0 71.9 70 130 0 0 Carbon disulfide 0.06304 0.0050 0.05 0 71.9 70 130 0 0 Carbon tetrachloride 0.04955 0.0050 0.05 0 99.1 70 130 0 0 Chlorobenzene 0.04974 0.0050 0.05	
Acetone 0.05607 0.025 0.05 0 112 50 150 0 0 Benzene 0.04851 0.0050 0.05 0 97 70 130 0 0 Bromodichloromethane 0.04391 0.0050 0.05 0 87.8 70 130 0 0 Bromoform 0.04642 0.0050 0.05 0 92.8 70 130 0 0 Bromomethane 0.03593 0.010 0.05 0 71.9 70 130 0 0 Carbon disulfide 0.06304 0.0050 0.05 0 126 70 130 0 0 Carbon tetrachloride 0.04955 0.0050 0.05 0 99.1 70 130 0 0 Chlorobenzene 0.04974 0.0050 0.05 0 99.5 70 130 0 0 Chloroethane 0.04898 0.010 0.05 0	
Benzene 0.04851 0.0050 0.05 0 97 70 130 0 0 Bromodichloromethane 0.04391 0.0050 0.05 0 87.8 70 130 0 0 Bromoform 0.04642 0.0050 0.05 0 92.8 70 130 0 0 Bromomethane 0.03593 0.010 0.05 0 71.9 70 130 0 0 Carbon disulfide 0.06304 0.0050 0.05 0 126 70 130 0 0 Carbon tetrachloride 0.04955 0.0050 0.05 0 99.1 70 130 0 0 Chlorobenzene 0.04974 0.0050 0.05 0 99.5 70 130 0 0 Chlorobethane 0.04898 0.010 0.05 0 98 70 130 0 0	
Bromodichloromethane 0.04391 0.0050 0.05 0 87.8 70 130 0 0 Bromoform 0.04642 0.0050 0.05 0 92.8 70 130 0 0 Bromomethane 0.03593 0.010 0.05 0 71.9 70 130 0 0 Carbon disulfide 0.06304 0.0050 0.05 0 126 70 130 0 0 Carbon tetrachloride 0.04955 0.0050 0.05 0 99.1 70 130 0 0 Chlorobenzene 0.04974 0.0050 0.05 0 99.5 70 130 0 0 Chloroethane 0.04898 0.010 0.05 0 98 70 130 0 0	
Bromoform 0.04642 0.0050 0.05 0 92.8 70 130 0 0 Bromomethane 0.03593 0.010 0.05 0 71.9 70 130 0 0 Carbon disulfide 0.06304 0.0050 0.05 0 126 70 130 0 0 Carbon tetrachloride 0.04955 0.0050 0.05 0 99.1 70 130 0 0 Chlorobenzene 0.04974 0.0050 0.05 0 99.5 70 130 0 0 Chloroethane 0.04898 0.010 0.05 0 98 70 130 0 0	
Bromomethane 0.03593 0.010 0.05 0 71.9 70 130 0 0 Carbon disulfide 0.06304 0.0050 0.05 0 126 70 130 0 0 Carbon tetrachloride 0.04955 0.0050 0.05 0 99.1 70 130 0 0 Chlorobenzene 0.04974 0.0050 0.05 0 99.5 70 130 0 0 Chloroethane 0.04898 0.010 0.05 0 98 70 130 0 0	
Carbon disulfide 0.06304 0.0050 0.05 0 126 70 130 0 0 Carbon tetrachloride 0.04955 0.0050 0.05 0 99.1 70 130 0 0 Chlorobenzene 0.04974 0.0050 0.05 0 99.5 70 130 0 0 Chloroethane 0.04898 0.010 0.05 0 98 70 130 0 0	
Carbon tetrachloride 0.04955 0.0050 0.05 0 99.1 70 130 0 0 Chlorobenzene 0.04974 0.0050 0.05 0 99.5 70 130 0 0 Chloroethane 0.04898 0.010 0.05 0 98 70 130 0 0	
Chlorobenzene 0.04974 0.0050 0.05 0 99.5 70 130 0 0 Chloroethane 0.04898 0.010 0.05 0 98 70 130 0 0	
Chloroethane 0.04898 0.010 0.05 0 98 70 130 0 0	
Chloroform 0.04742 0.0050 0.05 0 94.8 70 130 0 0	
Chloromethane 0.03727 0.010 0.05 0 74.5 70 130 0 0	
cis-1,2-Dichloroethene 0.04695 0.0050 0.05 0 93.9 70 130 0 0	

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Page 10 of 17

Work Order:

0412027

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15505

Sample ID VLCS120404-2	SampType: LCS	TestCo	de: VOC_ENC	COR Units: mg/Kg		Prep Dat	te:		Run ID: VC	A-2_041204	A
Client ID: ZZZZZ	Batch ID: R15505	TestN	lo: SW5035/ 8	3260		Analysis Da	te: 12/4/2 0	004	SeqNo: 31	7836	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qua
cis-1,3-Dichloropropene	0.04625	0.0050	0.05	0	92.5	70	130	0	0		
Dibromochloromethane	0.04791	0.0050	0.05	0	95.8	70	130	0	0		
Ethylbenzene	0.05	0.0050	0.05	0	100	70	130	0	0		
Methyl tert-butyl ether	0.04703	0.0050	0.05	0	94.1	50	150	0	0		
Methylene chloride	0.04639	0.010	0.05	0.00263	87.5	70	130	0	0		
Styrene	0.04879	0.0050	0.05	0	97.6	70	130	0	0		
Tetrachloroethene	0.05447	0.0050	0.05	0	109	70	130	0	0		
Toluene	0.04844	0.0050	0.05	0	96.9	70	130	0	0		
trans-1,2-Dichloroethene	0.04861	0.0050	0.05	0	97.2	70	130	0	0		
trans-1,3-Dichloropropene	0.05387	0.0050	0.05	0	108	70	130	0	0		
Trichloroethene	0.04919	0.0050	0.05	0	98.4	70	130	0	0		
Vinyl chloride	0.04859	0.0050	0.05	0	97.2	70	130	0	0		
Xylenes, Total	0.1588	0.010	0.15	0	106	70	130	0	0		
Sample ID VLCSD120404-2	SampType: LCSD	TestCo	de: VOC_ENC	COR Units: mg/Kg		Prep Dat	te:		Run ID: VC	A-2_041204	IA.
Client ID: 77777			lo: SW5035/ 8	2260		Analysis Da	to: 12///20		0 11 04		
Client ID: ZZZZZ	Batch ID: R15505	Testr	NO. 3443033/6	5200		Allalysis Da	le. 12/4/20	004	SeqNo: 31	7837	
	Batch ID: R15505 Result	PQL		SPK Ref Val	%REC	•		RPD Ref Val	SeqNo: 31 %RPD	7837 RPDLimit	Qua
Analyte						•					Qua
Analyte 1,1,1-Trichloroethane	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qua
Analyte 1,1,1-Trichloroethane	Result 0.04873	PQL 0.0050	SPK value	SPK Ref Val	%REC 97.5	LowLimit 70	HighLimit	RPD Ref Val 0.05001	%RPD 2.59	RPDLimit 20	Qua
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane	Result 0.04873 0.04452	PQL 0.0050 0.0050	SPK value 0.05 0.05	SPK Ref Val 0 0	%REC 97.5 89	LowLimit 70 70	HighLimit 130 130	0.05001 0.04472	%RPD 2.59 0.448	RPDLimit 20 20	Qua
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane	Result 0.04873 0.04452 0.04694	PQL 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05	SPK Ref Val 0 0 0	%REC 97.5 89 93.9	LowLimit 70 70 70	HighLimit 130 130 130	RPD Ref Val 0.05001 0.04472 0.04713	%RPD 2.59 0.448 0.404	RPDLimit 20 20 20 20	Qua
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene	Result 0.04873 0.04452 0.04694 0.04771	PQL 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0 0	%REC 97.5 89 93.9 95.4	70 70 70 70 70	HighLimit 130 130 130 130	RPD Ref Val 0.05001 0.04472 0.04713 0.04661	%RPD 2.59 0.448 0.404 2.33	RPDLimit 20 20 20 20 20 20	Qua
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2-Dichloroethane	Result 0.04873 0.04452 0.04694 0.04771 0.04765	PQL 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0	%REC 97.5 89 93.9 95.4 95.3	LowLimit 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130	RPD Ref Val 0.05001 0.04472 0.04713 0.04661 0.04801	%RPD 2.59 0.448 0.404 2.33 0.753	RPDLimit 20 20 20 20 20 20 20 20	Qua
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene 1,2-Dichloroethane	Result 0.04873 0.04452 0.04694 0.04771 0.04765 0.04895	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0 0 0	%REC 97.5 89 93.9 95.4 95.3 97.9	LowLimit 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130	RPD Ref Val 0.05001 0.04472 0.04713 0.04661 0.04801 0.0467	%RPD 2.59 0.448 0.404 2.33 0.753 4.70	RPDLimit 20 20 20 20 20 20 20 20 20	Qua
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane	Result 0.04873 0.04452 0.04694 0.04771 0.04765 0.04895 0.04841	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0 0 0 0	%REC 97.5 89 93.9 95.4 95.3 97.9 96.8	LowLimit 70 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130 130	RPD Ref Val 0.05001 0.04472 0.04713 0.04661 0.04801 0.0467 0.04582	%RPD 2.59 0.448 0.404 2.33 0.753 4.70 5.50	RPDLimit 20 20 20 20 20 20 20 20 20 20 20	Qua
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone 2-Hexanone	Result 0.04873 0.04452 0.04694 0.04771 0.04765 0.04895 0.04841 0.04638	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0 0 0	%REC 97.5 89 93.9 95.4 95.3 97.9 96.8 92.8	TowLimit 70 70 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130 130	RPD Ref Val 0.05001 0.04472 0.04713 0.04661 0.04801 0.0467 0.04582 0.04905	%RPD 2.59 0.448 0.404 2.33 0.753 4.70 5.50 5.60	RPDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	Qua
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone	Result 0.04873 0.04452 0.04694 0.04771 0.04765 0.04895 0.04841 0.04638 0.04873	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.010	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0 0 0 0	%REC 97.5 89 93.9 95.4 95.3 97.9 96.8 92.8 97.5	TowLimit 70 70 70 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130 130 13	RPD Ref Val 0.05001 0.04472 0.04713 0.04661 0.04801 0.0467 0.04582 0.04905 0.04717	%RPD 2.59 0.448 0.404 2.33 0.753 4.70 5.50 5.60 3.25	RPDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	Qua
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 2-Hexanone 4-Methyl-2-pentanone	Result 0.04873 0.04452 0.04694 0.04771 0.04765 0.04895 0.04841 0.04638 0.04873 0.05153	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0010 0.010 0.010	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0 0 0 0 0 0	%REC 97.5 89 93.9 95.4 95.3 97.9 96.8 92.8 97.5 103	TowLimit 70 70 70 70 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130 130 13	RPD Ref Val 0.05001 0.04472 0.04713 0.04661 0.04801 0.04582 0.04905 0.04717 0.04825	%RPD 2.59 0.448 0.404 2.33 0.753 4.70 5.50 5.60 3.25 6.57	RPDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	Qua

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order:

Project:

0412027

32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15505

Sample ID VLCSD120404-2	SampType: LCSD		de: VOC_ENC	0 0		Prep Date				A-2_041204	Α
Client ID: ZZZZZ	Batch ID: R15505	TestN	lo: SW5035/8	260		Analysis Date	e: 12/4/2 0	004	SeqNo: 317	7837	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.04739	0.0050	0.05	0	94.8	70	130	0.04642	2.07	20	
Bromomethane	0.03774	0.010	0.05	0	75.5	70	130	0.03593	4.91	20	
Carbon disulfide	0.06289	0.0050	0.05	0	126	70	130	0.06304	0.238	20	
Carbon tetrachloride	0.0488	0.0050	0.05	0	97.6	70	130	0.04955	1.53	20	
Chlorobenzene	0.0494	0.0050	0.05	0	98.8	70	130	0.04974	0.686	20	
Chloroethane	0.04921	0.010	0.05	0	98.4	70	130	0.04898	0.468	20	
Chloroform	0.04836	0.0050	0.05	0	96.7	70	130	0.04742	1.96	20	
Chloromethane	0.03875	0.010	0.05	0	77.5	70	130	0.03727	3.89	20	
cis-1,2-Dichloroethene	0.04887	0.0050	0.05	0	97.7	70	130	0.04695	4.01	20	
cis-1,3-Dichloropropene	0.04814	0.0050	0.05	0	96.3	70	130	0.04625	4.00	20	
Dibromochloromethane	0.04889	0.0050	0.05	0	97.8	70	130	0.04791	2.02	20	
Ethylbenzene	0.04987	0.0050	0.05	0	99.7	70	130	0.05	0.260	20	
Methyl tert-butyl ether	0.05001	0.0050	0.05	0	100	50	150	0.04703	6.14	20	
Methylene chloride	0.04692	0.010	0.05	0.00263	88.6	70	130	0.04639	1.14	20	
Styrene	0.04789	0.0050	0.05	0	95.8	70	130	0.04879	1.86	20	
Tetrachloroethene	0.05277	0.0050	0.05	0	106	70	130	0.05447	3.17	20	
Toluene	0.04944	0.0050	0.05	0	98.9	70	130	0.04844	2.04	20	
trans-1,2-Dichloroethene	0.0501	0.0050	0.05	0	100	70	130	0.04861	3.02	20	
trans-1,3-Dichloropropene	0.05307	0.0050	0.05	0	106	70	130	0.05387	1.50	20	
Trichloroethene	0.04933	0.0050	0.05	0	98.7	70	130	0.04919	0.284	20	
Vinyl chloride	0.0497	0.0050	0.05	0	99.4	70	130	0.04859	2.26	20	
Xylenes, Total	0.1546	0.010	0.15	0	103	70	130	0.1588	2.70	20	

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Work Order: 0412027

Project:

ANALYTICAL QC SUMMARY REPORT

32088, Willow Street Station- General Iron

BatchID: R15510

Sample ID VBLK120504-2	SampType: MBLK	TestCod	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	te:		Run ID: VC	A-2_04120	5A
Client ID: ZZZZZ	Batch ID: R15510	TestN	lo: SW5035/ 8	3260		Analysis Da	te: 12/5/2	004	SeqNo: 31	7893	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.0050									
1,1,2,2-Tetrachloroethane	ND	0.0050									
1,1,2-Trichloroethane	ND	0.0050									
1,1-Dichloroethane	ND	0.0050									
1,1-Dichloroethene	ND	0.0050									
1,2-Dichloroethane	ND	0.0050									
1,2-Dichloropropane	ND	0.0050									
2-Butanone	ND	0.010									
2-Hexanone	ND	0.010									
4-Methyl-2-pentanone	ND	0.010									
Acetone	ND	0.025									
Benzene	ND	0.0050									
Bromodichloromethane	ND	0.0050									
Bromoform	ND	0.0050									
Bromomethane	ND	0.010									
Carbon disulfide	ND	0.0050									
Carbon tetrachloride	ND	0.0050									
Chlorobenzene	ND	0.0050									
Chloroethane	ND	0.010									
Chloroform	ND	0.0050									
Chloromethane	ND	0.010									
cis-1,2-Dichloroethene	ND	0.0050									
cis-1,3-Dichloropropene	ND	0.0050									
Dibromochloromethane	ND	0.0050									
Ethylbenzene	ND	0.0050									
Methyl tert-butyl ether	ND	0.0050									
Methylene chloride	0.00139	0.010									J
Styrene	ND	0.0050									
Tetrachloroethene	ND	0.0050									
Toluene	ND	0.0050									
trans-1,2-Dichloroethene	ND	0.0050									

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Work Order: 0412027

0412027

Project: 32088, Willow Street Station- General Iron BatchID: R15510

Sample ID VBLK120504-2 Client ID: ZZZZZ	SampType: MBLK Batch ID: R15510		de: VOC_ENC	COR Units: mg/Kg		Prep Dat Analysis Da		004	Run ID: VC SeqNo: 31	_	5A
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	0.0050									
Trichloroethene	ND	0.0050									
Vinyl chloride	ND	0.0050									
Xylenes, Total	ND	0.010									

Sample ID VLCS120504-2	SampType: LCS	TestCo	de: VOC_EN	COR Units: mg/Kg		Prep Da	te:		Run ID: V	OA-2_04120	5A
Client ID: ZZZZZ	Batch ID: R15510	Test	No: SW5035/ 8	3260		Analysis Da	ate: 12/5/2	004	SeqNo: 3	17894	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.05018	0.0050	0.05	0	100	70	130	0	0)	
1,1,2,2-Tetrachloroethane	0.04199	0.0050	0.05	0	84	70	130	0	0)	
1,1,2-Trichloroethane	0.0474	0.0050	0.05	0	94.8	70	130	0	0)	
1,1-Dichloroethane	0.04887	0.0050	0.05	0	97.7	70	130	0	0)	
1,1-Dichloroethene	0.04892	0.0050	0.05	0	97.8	70	130	0	0)	
1,2-Dichloroethane	0.04739	0.0050	0.05	0	94.8	70	130	0	0)	
1,2-Dichloropropane	0.04603	0.0050	0.05	0	92.1	70	130	0	0)	
2-Butanone	0.04513	0.010	0.05	0	90.3	70	130	0	0)	
2-Hexanone	0.04515	0.010	0.05	0	90.3	70	130	0	0)	
4-Methyl-2-pentanone	0.04566	0.010	0.05	0	91.3	70	130	0	0)	
Acetone	0.06161	0.025	0.05	0	123	50	150	0	0)	
Benzene	0.04711	0.0050	0.05	0	94.2	70	130	0	0)	
Bromodichloromethane	0.04305	0.0050	0.05	0	86.1	70	130	0	0)	
Bromoform	0.04622	0.0050	0.05	0	92.4	70	130	0	0)	
Bromomethane	0.03514	0.010	0.05	0	70.3	70	130	0	0)	
Carbon disulfide	0.06137	0.0050	0.05	0	123	70	130	0	0)	
Carbon tetrachloride	0.04859	0.0050	0.05	0	97.2	70	130	0	0)	
Chlorobenzene	0.04881	0.0050	0.05	0	97.6	70	130	0	0)	
Chloroethane	0.04886	0.010	0.05	0	97.7	70	130	0	0)	
Chloroform	0.04879	0.0050	0.05	0	97.6	70	130	0	0)	
Chloromethane	0.038	0.010	0.05	0	76	70	130	0	0)	
cis-1,2-Dichloroethene	0.05012	0.0050	0.05	0	100	70	130	0	0)	

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ANALYTICAL QC SUMMARY REPORT

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Work Order:

0412027

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15510

Sample ID VLCS120504-2	SampType: LCS	TestCo	de: VOC_ENC	COR Units: mg/Kg		Prep Dat	e:		Run ID: VO	A-2_041205	iΑ
Client ID: ZZZZZ	Batch ID: R15510	TestN	lo: SW5035/ 8	3260		Analysis Da	te: 12/5/2 0	004	SeqNo: 317	7894	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	0.04727	0.0050	0.05	0	94.5	70	130	0	0		
Dibromochloromethane	0.0487	0.0050	0.05	0	97.4	70	130	0	0		
Ethylbenzene	0.04847	0.0050	0.05	0	96.9	70	130	0	0		
Methyl tert-butyl ether	0.04872	0.0050	0.05	0	97.4	50	150	0	0		
Methylene chloride	0.04823	0.010	0.05	0.00139	93.7	70	130	0	0		
Styrene	0.04622	0.0050	0.05	0	92.4	70	130	0	0		
Tetrachloroethene	0.0526	0.0050	0.05	0	105	70	130	0	0		
Toluene	0.04763	0.0050	0.05	0	95.3	70	130	0	0		
trans-1,2-Dichloroethene	0.05072	0.0050	0.05	0	101	70	130	0	0		
trans-1,3-Dichloropropene	0.05165	0.0050	0.05	0	103	70	130	0	0		
Trichloroethene	0.05031	0.0050	0.05	0	101	70	130	0	0		
Vinyl chloride	0.05024	0.0050	0.05	0	100	70	130	0	0		
Xylenes, Total	0.1518	0.010	0.15	0	101	70	130	0	0		
Sample ID VLCSD120504-2	SampType: LCSD	TestCo	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	e:		Run ID: VO	A-2_041205	iA
Sample ID VLCSD120504-2 Client ID: ZZZZZ	SampType: LCSD Batch ID: R15510		de: VOC_ENC	5 5		Prep Dat Analysis Da		004	Run ID: VO		iΑ
Client ID: ZZZZZ			_	5 5	%REC	Analysis Da	te: 12/5/2 0	004 RPD Ref Val			
Client ID: ZZZZZ Analyte	Batch ID: R15510	TestN	lo: SW5035/ 8	3260		Analysis Da	te: 12/5/2 0		SeqNo: 317	7895	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane	Batch ID: R15510 Result	TestN PQL	SPK value	SPK Ref Val	%REC	Analysis Da	te: 12/5/2 0	RPD Ref Val	SeqNo: 317	7895 RPDLimit	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	Batch ID: R15510 Result 0.05132	PQL 0.0050	SPK value 0.05	SPK Ref Val 0	%REC 103	Analysis Da LowLimit 70	te: 12/5/2 0 HighLimit 130	RPD Ref Val 0.05018	SeqNo: 31 7 %RPD 2.25	7895 RPDLimit	
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane	Batch ID: R15510 Result 0.05132 0.04491	PQL 0.0050 0.0050	SPK value 0.05 0.05	SPK Ref Val 0 0	%REC 103 89.8	Analysis Da LowLimit 70 70	te: 12/5/2 0 HighLimit 130 130	0.05018 0.04199	SeqNo: 31 7 %RPD 2.25 6.72	7895 RPDLimit 20 20	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane	Batch ID: R15510 Result 0.05132 0.04491 0.04998	PQL 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05	SPK Ref Val 0 0 0	%REC 103 89.8 100	Analysis Da LowLimit 70 70 70	HighLimit 130 130 130	RPD Ref Val 0.05018 0.04199 0.0474	SeqNo: 31 7 %RPD 2.25 6.72 5.30	RPDLimit 20 20 20 20	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane	Batch ID: R15510 Result 0.05132 0.04491 0.04998 0.04775	PQL 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0	%REC 103 89.8 100 95.5	Analysis Da LowLimit 70 70 70 70	HighLimit 130 130 130 130	RPD Ref Val 0.05018 0.04199 0.0474 0.04887	SeqNo: 317 %RPD 2.25 6.72 5.30 2.32	7895 RPDLimit 20 20 20 20 20	
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane	Batch ID: R15510 Result 0.05132 0.04491 0.04998 0.04775 0.0489	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0	%REC 103 89.8 100 95.5 97.8	Analysis Da LowLimit 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130	RPD Ref Val 0.05018 0.04199 0.0474 0.04887 0.04892	SeqNo: 317 %RPD 2.25 6.72 5.30 2.32 0.0409	7895 RPDLimit 20 20 20 20 20 20 20	
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane	Batch ID: R15510 Result 0.05132 0.04491 0.04998 0.04775 0.0489 0.0493	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0 0	%REC 103 89.8 100 95.5 97.8 98.6	Analysis Da LowLimit 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130	0.05018 0.04199 0.0474 0.04887 0.04892 0.04739	SeqNo: 317 %RPD 2.25 6.72 5.30 2.32 0.0409 3.95	7895 RPDLimit 20 20 20 20 20 20 20 20 20	
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone	Result 0.05132 0.04491 0.04998 0.04775 0.0489 0.0493 0.04699	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0	%REC 103 89.8 100 95.5 97.8 98.6 94	. Analysis Da LowLimit 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130 130 13	0.05018 0.04199 0.0474 0.04887 0.04892 0.04739 0.04603	SeqNo: 317 %RPD 2.25 6.72 5.30 2.32 0.0409 3.95 2.06	7895 RPDLimit 20 20 20 20 20 20 20 20 20 20 20	
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone 2-Hexanone	Result 0.05132 0.04491 0.04998 0.04775 0.0489 0.0493 0.04699 0.05156	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0 0	%REC 103 89.8 100 95.5 97.8 98.6 94 103	. Analysis Da LowLimit 70 70 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130 130 13	RPD Ref Val 0.05018 0.04199 0.0474 0.04887 0.04892 0.04739 0.04603 0.04513	SeqNo: 317 %RPD 2.25 6.72 5.30 2.32 0.0409 3.95 2.06 13.3	7895 RPDLimit 20 20 20 20 20 20 20 20 20 20 20 20	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethene	Result 0.05132 0.04491 0.04998 0.04775 0.0489 0.0493 0.04699 0.05156 0.04682	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.010 0.010	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0 0 0 0	%REC 103 89.8 100 95.5 97.8 98.6 94 103 93.6	. Analysis Da LowLimit 70 70 70 70 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130 130 13	RPD Ref Val 0.05018 0.04199 0.0474 0.04887 0.04892 0.04739 0.04603 0.04513 0.04515	SeqNo: 317 %RPD 2.25 6.72 5.30 2.32 0.0409 3.95 2.06 13.3 3.63	7895 RPDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 2-Butanone 2-Hexanone 4-Methyl-2-pentanone	Result 0.05132 0.04491 0.04998 0.04775 0.0489 0.0493 0.04699 0.05156 0.04682 0.04937	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0010 0.010 0.010	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0 0 0 0 0 0	%REC 103 89.8 100 95.5 97.8 98.6 94 103 93.6 98.7	. Analysis Da LowLimit 70 70 70 70 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130 130 13	0.05018 0.04199 0.0474 0.04887 0.04892 0.04739 0.04603 0.04513 0.04515 0.04566	SeqNo: 317 %RPD 2.25 6.72 5.30 2.32 0.0409 3.95 2.06 13.3 3.63 7.81	7895 RPDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	Qua

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order: 0412027

32088, Willow Street Station-General Iron **Project:**

ANALYTICAL QC SUMMARY REPORT

BatchID: R15510

Sample ID VLCSD120504-2	SampType: LCSD	TestCod	de: VOC_ENC	OR Units: mg/Kg		Prep Date	e:		Run ID: VOA-2_041205A		
Client ID: ZZZZZ	Batch ID: R15510	TestN	lo: SW5035/8	260		Analysis Dat	e: 12/5/2 0	004	SeqNo: 317	7895	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.05092	0.0050	0.05	0	102	70	130	0.04622	9.68	20	
Bromomethane	0.03729	0.010	0.05	0	74.6	70	130	0.03514	5.94	20	
Carbon disulfide	0.0633	0.0050	0.05	0	127	70	130	0.06137	3.10	20	
Carbon tetrachloride	0.05182	0.0050	0.05	0	104	70	130	0.04859	6.43	20	
Chlorobenzene	0.05096	0.0050	0.05	0	102	70	130	0.04881	4.31	20	
Chloroethane	0.04933	0.010	0.05	0	98.7	70	130	0.04886	0.957	20	
Chloroform	0.0495	0.0050	0.05	0	99	70	130	0.04879	1.44	20	
Chloromethane	0.0384	0.010	0.05	0	76.8	70	130	0.038	1.05	20	
cis-1,2-Dichloroethene	0.05085	0.0050	0.05	0	102	70	130	0.05012	1.45	20	
cis-1,3-Dichloropropene	0.04869	0.0050	0.05	0	97.4	70	130	0.04727	2.96	20	
Dibromochloromethane	0.05112	0.0050	0.05	0	102	70	130	0.0487	4.85	20	
Ethylbenzene	0.0511	0.0050	0.05	0	102	70	130	0.04847	5.28	20	
Methyl tert-butyl ether	0.05089	0.0050	0.05	0	102	50	150	0.04872	4.36	20	
Methylene chloride	0.04817	0.010	0.05	0.00139	93.6	70	130	0.04823	0.124	20	
Styrene	0.04986	0.0050	0.05	0	99.7	70	130	0.04622	7.58	20	
Tetrachloroethene	0.05527	0.0050	0.05	0	111	70	130	0.0526	4.95	20	
Toluene	0.04941	0.0050	0.05	0	98.8	70	130	0.04763	3.67	20	
trans-1,2-Dichloroethene	0.05097	0.0050	0.05	0	102	70	130	0.05072	0.492	20	
trans-1,3-Dichloropropene	0.05494	0.0050	0.05	0	110	70	130	0.05165	6.17	20	
Trichloroethene	0.05253	0.0050	0.05	0	105	70	130	0.05031	4.32	20	
Vinyl chloride	0.05152	0.0050	0.05	0	103	70	130	0.05024	2.52	20	
Xylenes, Total	0.1588	0.010	0.15	0	106	70	130	0.1518	4.50	20	

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Work Order: 0412027

0412027

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15449

Sample ID	MBLK	SampType:	MBLK	TestCod	e: PMOIST	Units: wt%		Prep Date:	12/1/2	004	Run ID: B	ALANCE_041	1201A
Client ID:	ZZZZZ	Batch ID:	R15449	TestN	o: D2974			Analysis Date	e: 12/2/2	004	SeqNo: 3'	16714	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit I	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Mo	oisture		ND	0.01000									*
Sample ID	LCS-S	SampType:	LCS	TestCod	e: PMOIST	Units: wt%		Prep Date:	12/1/2	004	Run ID: B	ALANCE_041	1201A
Client ID:	ZZZZZ	Batch ID:	R15449	TestN	o: D2974			Analysis Date	: 12/2/2	004	SeqNo: 3	16715	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit I	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Mo	oisture		4.96	0.01000	5	0	99.2	80	120	0	0		*
Sample ID	I CC W	C = T	1.00	T (0	- DMOIST				. 40/4/0	004	D ID. D	ALANCE OF	1004 A
Sample ID	LCS-VV	SampType:	LCS	TestCod	e: PMOIST	Units: wt%		Prep Date:	12/1/2	004	Run ID: B	ALANCE_041	1201A
Client ID:	ZZZZZ	Batch ID:			o: D2974	Units: Wt%		Analysis Date			SeqNo: 3	_	1201A
						SPK Ref Val	%REC	Analysis Date		004		_	Qual
Client ID:	ZZZZZ		R15449	TestN	o: D2974			Analysis Date	e: 12/2/2	004	SeqNo: 3	16716 RPDLimit	
Client ID: Analyte Percent Mo	ZZZZZ		R15449 Result 99.81	TestN PQL 0.01000	o: D2974 SPK value	SPK Ref Val	%REC	Analysis Date	e: 12/2/2 0 HighLimit 120	RPD Ref Val	SeqNo: 3°	16716 RPDLimit	Qual *
Client ID: Analyte Percent Mo	ZZZZZ Disture	Batch ID: SampType:	R15449 Result 99.81	PQL 0.01000 TestCod	o: D2974 SPK value 99.8	SPK Ref Val	%REC	Analysis Date LowLimit I	e: 12/2/2 HighLimit 120 : 12/2/2	004 RPD Ref Val 0	SeqNo: 3°	16716 RPDLimit ALANCE_041	Qual *
Client ID: Analyte Percent Mo	Disture 0412046-001A DUP	Batch ID: SampType:	R15449 Result 99.81 DUP	PQL 0.01000 TestCod	o: D2974 SPK value 99.8 de: PMOIST	SPK Ref Val	%REC	Analysis Date LowLimit 80 Prep Date:	HighLimit 120 12/2/2 12/2/2 12/3/2	004 RPD Ref Val 0 004 004	SeqNo: 3' %RPD 0 Run ID: B	16716 RPDLimit ALANCE_041	Qual *

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

December 15, 2004

Burns & McDonnell 2601 W. 22nd Street

OakBrook, IL 60523-1229 Telephone: (312) 563-0371 Fax: (630) 990-0301

RE: 32088, Willow Street Station- General Iron STAT Project No: 0412059

Dear Diane Saftic:

STAT Analysis received 12 samples for the referenced project on 12/2/2004. The analytical results are presented in the following report.

This report is revised to reflect changes made after the initial report was issued.

All analyses were performed in accordance with the requirements of 35 IAC part 186 (Accreditation #100445). Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 563-0371.

Sincerely,

Craig Chawla

Project Manager

The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory.

Date: December 15, 2004

Client: Burns & McDonnell

Project: 32088, Willow Street Station-General Iron Work Order Sample Summary

Lab Order: 0412059

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
0412059-001A	WSS-SB52-001	6-8'	12/2/2004 8:05:00 AM	12/2/2004
0412059-001B	WSS-SB52-001	6-8'	12/2/2004 8:05:00 AM	12/2/2004
0412059-002A	WSS-SB52-002	12-14'	12/2/2004 8:20:00 AM	12/2/2004
0412059-002B	WSS-SB52-002	12-14'	12/2/2004 8:20:00 AM	12/2/2004
0412059-003A	WSS-SB55-001	6-8'	12/2/2004 9:25:00 AM	12/2/2004
0412059-003B	WSS-SB55-001	6-8'	12/2/2004 9:25:00 AM	12/2/2004
0412059-004A	WSS-SB55-002	12-14'	12/2/2004 9:35:00 AM	12/2/2004
0412059-004B	WSS-SB55-002	12-14'	12/2/2004 9:35:00 AM	12/2/2004
0412059-005A	WSS-SB54-001	8-10'	12/2/2004 10:40:00 AM	12/2/2004
0412059-005B	WSS-SB54-001	8-10'	12/2/2004 10:40:00 AM	12/2/2004
0412059-006A	WSS-SB54-002	14-16'	12/2/2004 10:55:00 AM	12/2/2004
0412059-006B	WSS-SB54-002	14-16'	12/2/2004 10:55:00 AM	12/2/2004
0412059-007A	WSS-SB58-001	12-14'	12/2/2004 12:40:00 PM	12/2/2004
0412059-007B	WSS-SB58-001	12-14'	12/2/2004 12:40:00 PM	12/2/2004
0412059-008A	WSS-SB58-002	16-18'	12/2/2004 1:10:00 PM	12/2/2004
0412059-008B	WSS-SB58-002	16-18'	12/2/2004 1:10:00 PM	12/2/2004
0412059-009A	WSS-SB58-003	8-10'	12/2/2004 12:45:00 PM	12/2/2004
0412059-009B	WSS-SB58-003	8-10'	12/2/2004 12:45:00 PM	12/2/2004
0412059-010A	WSS-SB49B-001	14-16'	12/2/2004 2:10:00 PM	12/2/2004
0412059-010B	WSS-SB49B-001	14-16'	12/2/2004 2:10:00 PM	12/2/2004
0412059-011A	WSS-TB04A			12/2/2004
0412059-012A	WSS-TB04B			12/2/2004

Sittle in Julius II Francis

Date: December 15, 2004

CLIENT: Burns & McDonnell

Project: 32088, Willow Street Station- General Iron CASE NARRATIVE

Lab Order: 0412059

Due to matrix interference, the following samples had VOC surrogates out of control for both analysis and reanalysis:

Sample WSS-SB52-002 (0412059-002): Toluene-d8, 85%/81% recovery (QC Limits 85-110%) Sample WSS-SB58-002 (0412059-008): Toluene-d8, 84%/85% recovery (QC Limits 85-110%) Sample WSS-SB58-003 (0412059-009): 4-Bromofluorobenzene, 59%/53% recovery (QC Limits 63-110%)

Due to matrix interference, the following samples had high SVOC soil surrogate recoveries:

WSS-SB58-001 (0412059-007):

2,4,6-Tribromophenol: 127% Recovery, QC Limits 12-122%

WSS-SB58-003 (0412059-009):

2,4,6-Tribromophenol: 157% Recovery, QC Limits 19-122% 4-Terphenyl-d14: 195% Recovery, QC Limits 18-137%

Due to matrix interference, the MS/MSD prepared from sample WSS-SB58-001 (0412059-007) had the following SVOC soil spike compounds out of control:

4-Chloro-3-methylphenol: 109% Recovery, QC Limits 62-100% (MS)

Pentachlorophenol: 39% Recovery, QC Limits 40-120% (MSD)

Due to matrix interference, the MS/MSD prepared from sample WSS-SB58-002 (0412059-008) had the following SVOC soil spike compounds out of control:

N-Nitrosodi-n-propylamine: 105%/130% Recovery, QC Limits 55-100% (MS/MSD)

Pentachlorophenol: 18%/23% Recovery, QC Limits 40-120% (MS/MSD)

2-Chlorophenol: 92% Recovery, QC Limits 61-91% (MSD)

4-Chloro-3-methylphenol: 109% Recovery, QC Limits 62-100% (MSD)

Phenol: 106% Recovery, QC Limits 60-91% (MSD)

Due to matrix interference, the MS prepared from sample WSS-SB58-002 (0412059-008) had high PNA soil spike recovery for Naphthalene (150% Recovery, QC Limits 30-130%).

Due to the sample concentration being four times greater than the spike amount, the MS/MSD prepared from sample WSS-SB58-002 (0412059-008) had PNA spike compounds out of control.

The MS/MSD prepared from sample WSS-SB58-001 (0412059-007) had out of control recoveries on TPH soil spike compounds Diesel (180%/360% Recovery, QC Limits 30-150%, 51% RPD, QC Limit 25% RPD) and Oil (310%/673% Recovery, QC Limits 30-150%, 45% RPD, QC Limit 25% RPD).

The MSD prepared from sample WSS-SB58-002 (0412059-008) had high TPH soil spike recovery for Oil (166% Recovery, QC Limits 30-150%).

2201 West Campbell Park Drive Chicago, IL 60612-3547
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Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB52-001

Lab Order: 0412059 **Tag Number:** 6-8'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/2/2004 8:05:00 AM

Lab ID: 0412059-001A **Matrix:** Soil

Analyses	Result	RL (Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW503	/2004 Analyst: PS			
Acetone	ND	1.4	mg/Kg-dry	50	12/8/2004
Benzene	2.6	0.28	mg/Kg-dry	50	12/8/2004
Bromodichloromethane	ND	0.28	mg/Kg-dry	50	12/8/2004
Bromoform	ND	0.28	mg/Kg-dry	50	12/8/2004
Bromomethane	ND	0.55	mg/Kg-dry	50	12/8/2004
2-Butanone	ND	0.55	mg/Kg-dry	50	12/8/2004
Carbon disulfide	ND	0.28	mg/Kg-dry	50	12/8/2004
Carbon tetrachloride	ND	0.28	mg/Kg-dry	50	12/8/2004
Chlorobenzene	ND	0.28	mg/Kg-dry	50	12/8/2004
Chloroethane	ND	0.55	mg/Kg-dry	50	12/8/2004
Chloroform	ND	0.28	mg/Kg-dry	50	12/8/2004
Chloromethane	ND	0.28	mg/Kg-dry	50	12/8/2004
Dibromochloromethane	ND	0.28	mg/Kg-dry	50	12/8/2004
1,1-Dichloroethane	ND	0.28	mg/Kg-dry	50	12/8/2004
1,2-Dichloroethane	ND	0.28	mg/Kg-dry	50	12/8/2004
1,1-Dichloroethene	ND	0.28	mg/Kg-dry	50	12/8/2004
cis-1,2-Dichloroethene	ND	0.28	mg/Kg-dry	50	12/8/2004
trans-1,2-Dichloroethene	ND	0.28	mg/Kg-dry	50	12/8/2004
1,2-Dichloropropane	ND	0.28	mg/Kg-dry	50	12/8/2004
cis-1,3-Dichloropropene	ND	0.28	mg/Kg-dry	50	12/8/2004
trans-1,3-Dichloropropene	ND	0.28	mg/Kg-dry	50	12/8/2004
Ethylbenzene	11	0.28	mg/Kg-dry	50	12/8/2004
2-Hexanone	ND	0.55	mg/Kg-dry	50	12/8/2004
4-Methyl-2-pentanone	ND	0.55	mg/Kg-dry	50	12/8/2004
Methylene chloride	ND	0.55	mg/Kg-dry	50	12/8/2004
Methyl tert-butyl ether	ND	0.28	mg/Kg-dry	50	12/8/2004
Styrene	ND	0.28	mg/Kg-dry	50	12/8/2004
1,1,2,2-Tetrachloroethane	ND	0.28	mg/Kg-dry	50	12/8/2004
Tetrachloroethene	ND	0.28	mg/Kg-dry	50	12/8/2004
Toluene	0.7	0.28	mg/Kg-dry	50	12/8/2004
1,1,1-Trichloroethane	ND	0.28	mg/Kg-dry	50	12/8/2004
1,1,2-Trichloroethane	ND	0.28	mg/Kg-dry	50	12/8/2004
Trichloroethene	ND	0.28	mg/Kg-dry	50	12/8/2004
Vinyl chloride	ND	0.28	mg/Kg-dry	50	12/8/2004
Xylenes, Total	9.8	0.55	mg/Kg-dry	50	12/8/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Holding time exceeded Page 1 of 30

H - Holding time exceeded

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Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB52-001

Lab Order: 0412059 **Tag Number:** 6-8'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/2/2004 8:05:00 AM

Lab ID: 0412059-001B **Matrix:** Soil

Total Petroleum Hydrocarbons SW8015M (SW3580A) Prep Date: 12/7/2004 Analyst: JF TPH (Gasoline) 24 23 * mg/Kg-dry 1 12/8/2004 TPH (Diesel) 420 23 * mg/Kg-dry 1 12/8/2004 TPH (Oil) 330 23 * mg/Kg-dry 1 12/8/2004 Polynuclear Aromatic Hydrocarbons SW8270C-SIM (SW3550B) Prep Date: 12/7/2004 Analyst: VS Acenaphthylene 1 0.3 mg/Kg-dry 10 12/8/2004 Acenaphthylene 1 0.3 mg/Kg-dry 10 12/8/2004 Acenaphthylene 1.8 0.3 mg/Kg-dry 10 12/8/2004 Acenaphthylene 1.8 0.3 mg/Kg-dry 10 12/8/2004 Benz(a)Amthracene 1.8 0.3 mg/Kg-dry 10 12/8/2004 Benz(a)Lipuranthene 0.71 0.3 mg/Kg-dry 10 12/8/2004 Benz(a)Lipuranthene 0.18 0.03 mg/Kg-dry 1 12/7/2004 Benz(a)Lipuranthene 0.13<	Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
TPH (Gasoline)	Total Petroleum Hydrocarbons	SW80)15M (SW	/3580A)	Prep	Date: 12/7/2004	Analyst: JF
TPH (Oil)	TPH (Gasoline)	24	23	*	mg/Kg-dry	1	12/8/2004
Polynuclear Aromatic Hydrocarbons SW8270C-SIM (SW3550B) Prep Date: 12/7/2004 Analyst: VSAAcenaphthene Acenaphthene 3.7 3 mg/Kg-dry 100 12/8/2004 Acenaphthylene 1 0.3 mg/Kg-dry 10 12/8/2004 Anthracene 2.2 0.3 mg/Kg-dry 10 12/8/2004 Benzo(b)fluoranthene 0.71 0.3 mg/Kg-dry 10 12/8/2004 Benzo(k)fluoranthene 0.71 0.3 mg/Kg-dry 10 12/8/2004 Benzo(k)fluoranthene 0.31 0.03 mg/Kg-dry 1 12/7/2004 Benzo(a)pyrene 1.3 0.3 mg/Kg-dry 1 12/8/2004 Benzo(a)pyrene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Chrysene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Dibenz(a,hyanthracene 2.7 0.3 mg/Kg-dry 10 12/8/2004 Fluorene 2.7 0.3 mg/Kg-dry 10 12/8/2004	TPH (Diesel)	420	23	*	mg/Kg-dry	1	12/8/2004
Acenaphthene 3.7 3 mg/Kg-dry 100 12/8/2004 Acenaphthylene 1 0.3 mg/Kg-dry 10 12/8/2004 Anthracene 2.2 0.3 mg/Kg-dry 10 12/8/2004 Benza(a)anthracene 1.8 0.3 mg/Kg-dry 10 12/8/2004 Benzo(b)fluoranthene 0.71 0.3 mg/Kg-dry 10 12/8/2004 Benzo(k)fluoranthene 0.31 0.03 mg/Kg-dry 1 12/7/2004 Benzo(a)pyrene 1.3 0.3 mg/Kg-dry 1 12/7/2004 Benzo(a)pyrene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Chrysene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Dibenz(a,h)anthracene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Fluoranthene 2.7 0.3 mg/Kg-dry 10 12/8/2004 Fluorene 3.6 3 mg/Kg-dry 10 12/8/2004 Naphthalene	TPH (Oil)	330	23	*	mg/Kg-dry	1	12/8/2004
Acenaphthylene 1 0.3 mg/Kg-dry 10 12/8/2004 Anthracene 2.2 0.3 mg/Kg-dry 10 12/8/2004 Benz(a)anthracene 1.8 0.3 mg/Kg-dry 10 12/8/2004 Benzo(k)fluoranthene 0.71 0.3 mg/Kg-dry 10 12/8/2004 Benzo(k)fluoranthene 0.31 0.03 mg/Kg-dry 1 12/8/2004 Benzo(a)pyrene 0.18 0.03 mg/Kg-dry 10 12/8/2004 Chrysene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Chrysene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Fluoranthene 2.7 0.3 mg/Kg-dry 10 12/8/2004 Fluoranthene 3.6 3 mg/Kg-dry 10 12/8/2004 Indeno(1,2,3-cd)pyrene 3.6 3 mg/Kg-dry 10 12/8/2004 Naphthalene 22 3 mg/Kg-dry 10 12/8/2004 Pyrene	Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550I	B) Prep	Date: 12/7/2004	Analyst: VS
Anthracene 2.2 0.3 mg/Kg-dry 10 12/8/2004 Benza(a)anthracene 1.8 0.3 mg/Kg-dry 10 12/8/2004 Benzo(b)fluoranthene 0.71 0.3 mg/Kg-dry 10 12/8/2004 Benzo(g),h,i)perylene 0.31 0.03 mg/Kg-dry 1 12/7/2004 Benzo(a)pyrene 1.3 0.3 mg/Kg-dry 10 12/8/2004 Chrysene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Dibenz(a,h)anthracene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Fluoranthene 2.7 0.3 mg/Kg-dry 10 12/8/2004 Fluorene 3.6 3 mg/Kg-dry 10 12/8/2004 Indeno(1,2,3-cd)pyrene 0.35 0.3 mg/Kg-dry 10 12/8/2004 Phenanthrene 22 3 mg/Kg-dry 10 12/8/2004 Phenanthrene 11 3 mg/Kg-dry 100 12/8/2004 Bis(2-chloro	Acenaphthene	3.7	3		mg/Kg-dry	100	12/8/2004
Benz(a)anthracene 1.8 0.3 mg/Kg-dry 10 12/8/2004 Benzo(b)fluoranthene 0.71 0.3 mg/Kg-dry 10 12/8/2004 Benzo(b)fluoranthene 0.31 0.03 mg/Kg-dry 1 12/7/2004 Benzo(g),hi)perylene 0.18 0.03 mg/Kg-dry 1 12/7/2004 Benzo(a)pyrene 1.3 0.3 mg/Kg-dry 10 12/8/2004 Chrysene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Dibenz(a,h)anthracene 0.1 0.03 mg/Kg-dry 10 12/8/2004 Fluoranthene 2.7 0.3 mg/Kg-dry 10 12/8/2004 Fluorene 3.6 3 mg/Kg-dry 10 12/8/2004 Indenot(1,2,3-cd)pyrene 0.35 0.3 mg/Kg-dry 10 12/8/2004 Naphthalene 22 3 mg/Kg-dry 10 12/8/2004 Pyrene 4.5 3 mg/Kg-dry 100 12/8/2004 Bis(2-c	Acenaphthylene	1	0.3		mg/Kg-dry	10	12/8/2004
Benzo(b)fluoranthene 0.71 0.3 mg/Kg-dry 10 12/8/2004 Benzo(g,Hi,l)perylene 0.31 0.03 mg/Kg-dry 1 12/7/2004 Benzo(a)pyrene 0.18 0.03 mg/Kg-dry 1 12/7/2004 Benzo(a)pyrene 1.3 0.3 mg/Kg-dry 10 12/8/2004 Chrysene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Dibenz(a,h)anthracene 0.1 0.03 mg/Kg-dry 10 12/8/2004 Fluoranthene 2.7 0.3 mg/Kg-dry 10 12/8/2004 Fluorene 3.6 3 mg/Kg-dry 10 12/8/2004 Indeno(1,2,3-cd)pyrene 0.35 0.3 mg/Kg-dry 10 12/8/2004 Naphthalene 22 3 mg/Kg-dry 100 12/8/2004 Pyrene 4.5 3 mg/Kg-dry 100 12/8/2004 Semivolatile Organic Compounds by GC/Ms SW8270C (SW3550B) Prepubate: 12/7/204 Analyst: PAB Bis(Anthracene	2.2	0.3		mg/Kg-dry	10	12/8/2004
Benzo(k)fluoranthene 0.31 0.03 mg/Kg-dry 1 12/7/2004 Benzo(a)pyrene 0.18 0.03 mg/Kg-dry 1 12/7/2004 Benzo(a)pyrene 1.3 0.3 mg/Kg-dry 10 12/8/2004 Chrysene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Dibenz(a,h)anthracene 0.1 0.03 mg/Kg-dry 1 12/8/2004 Fluoranthene 2.7 0.3 mg/Kg-dry 10 12/8/2004 Fluorene 3.6 3 mg/Kg-dry 100 12/8/2004 Indenot(1,2,3-cd)pyrene 0.35 0.3 mg/Kg-dry 100 12/8/2004 Naphthalene 22 3 mg/Kg-dry 100 12/8/2004 Phenanthrene 11 3 mg/Kg-dry 100 12/8/2004 Pyrene 4.5 3 mg/Kg-dry 100 12/8/2004 Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethi	Benz(a)anthracene	1.8	0.3		mg/Kg-dry	10	12/8/2004
Benzo(g,h,i)perylene 0.18 0.03 mg/Kg-dry 1 12/7/2004 Benzo(a)pyrene 1.3 0.3 mg/Kg-dry 10 12/8/2004 Chrysene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Dibenz(a,h)anthracene 0.1 0.03 mg/Kg-dry 1 12/7/2004 Fluoranthene 2.7 0.3 mg/Kg-dry 10 12/8/2004 Fluorene 3.6 3 mg/Kg-dry 10 12/8/2004 Indeno(1,2,3-cd)pyrene 0.35 0.3 mg/Kg-dry 10 12/8/2004 Naphthalene 22 3 mg/Kg-dry 10 12/8/2004 Phenanthrene 11 3 mg/Kg-dry 100 12/8/2004 Pyrene 4.5 3 mg/Kg-dry 100 12/8/2004 Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chlo	Benzo(b)fluoranthene	0.71	0.3		mg/Kg-dry	10	12/8/2004
Benzo(a)pyrene 1.3 0.3 mg/Kg-dry 10 12/8/2004 Chrysene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Dibenz(a,h)anthracene 0.1 0.03 mg/Kg-dry 1 12/8/2004 Fluoranthene 2.7 0.3 mg/Kg-dry 10 12/8/2004 Fluorene 3.6 3 mg/Kg-dry 100 12/8/2004 Indeno(1,2,3-cd)pyrene 0.35 0.3 mg/Kg-dry 100 12/8/2004 Naphthalene 22 3 mg/Kg-dry 100 12/8/2004 Phenanthrene 11 3 mg/Kg-dry 100 12/8/2004 Pyrene 4.5 3 mg/Kg-dry 100 12/8/2004 Semivolatile Organic Compounds by GC/MS SW8270C (SW3550B) Prep Date: 12/7/2004 Analyst: PAB Bis(2-chloroethxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(Benzo(k)fluoranthene	0.31	0.03		mg/Kg-dry	1	12/7/2004
Chrysene 1.7 0.3 mg/Kg-dry 10 12/8/2004 Dibenz(a,h)anthracene 0.1 0.03 mg/Kg-dry 1 12/7/2004 Fluoranthene 2.7 0.3 mg/Kg-dry 10 12/8/2004 Fluorene 3.6 3 mg/Kg-dry 100 12/8/2004 Indeno(1,2,3-cd)pyrene 0.35 0.3 mg/Kg-dry 100 12/8/2004 Naphthalene 22 3 mg/Kg-dry 100 12/8/2004 Phenanthrene 11 3 mg/Kg-dry 100 12/8/2004 Pyrene 4.5 3 mg/Kg-dry 100 12/8/2004 Semivolatile Organic Compounds by GC/MS SW8270C (SW3550B) Prep Date: 12/7/2004 Analyst: PAB Bis(2-chloroethyl)ether ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethyl)ether ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chlynexyl)pthalate ND 0.4 mg/Kg-dry 1 12/8/2004 4	Benzo(g,h,i)perylene	0.18	0.03		mg/Kg-dry	1	12/7/2004
Dibenz(a,h)anthracene 0.1 0.03 mg/Kg-dry 1 12/7/2004 Fluoranthene 2.7 0.3 mg/Kg-dry 10 12/8/2004 Fluorene 3.6 3 mg/Kg-dry 100 12/8/2004 Indeno(1,2,3-cd)pyrene 0.35 0.3 mg/Kg-dry 10 12/8/2004 Naphthalene 22 3 mg/Kg-dry 100 12/8/2004 Phenanthrene 11 3 mg/Kg-dry 100 12/8/2004 Pyrene 4.5 3 mg/Kg-dry 100 12/8/2004 Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 100 12/8/2004 Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethoxy)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 <td>Benzo(a)pyrene</td> <td>1.3</td> <td>0.3</td> <td></td> <td>mg/Kg-dry</td> <td>10</td> <td>12/8/2004</td>	Benzo(a)pyrene	1.3	0.3		mg/Kg-dry	10	12/8/2004
Fluoranthene 2.7 0.3 mg/Kg-dry 10 12/8/2004 Fluorene 3.6 3 mg/Kg-dry 100 12/8/2004 Indeno(1,2,3-cd)pyrene 0.35 0.3 mg/Kg-dry 10 12/8/2004 Naphthalene 22 3 mg/Kg-dry 100 12/8/2004 Phenanthrene 11 3 mg/Kg-dry 100 12/8/2004 Pyrene 4.5 3 mg/Kg-dry 100 12/8/2004 Semivolatile Organic Compounds by GC/MS SW8270C (SW3550B) Prep Date: 12/7/2004 Analyst: PAB Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethyl)ether ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 4-Bromophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 <td>Chrysene</td> <td>1.7</td> <td>0.3</td> <td></td> <td>mg/Kg-dry</td> <td>10</td> <td>12/8/2004</td>	Chrysene	1.7	0.3		mg/Kg-dry	10	12/8/2004
Fluorene 3.6 3 mg/Kg-dry 100 12/8/2004 Indeno(1,2,3-cd)pyrene 0.35 0.3 mg/Kg-dry 10 12/8/2004 Naphthalene 22 3 mg/Kg-dry 100 12/8/2004 Phenanthrene 11 3 mg/Kg-dry 100 12/8/2004 Pyrene 4.5 3 mg/Kg-dry 100 12/8/2004 Semivolatile Organic Compounds by GC/MS SW8270C (SW3550B) Prep Date: 12/7/2004 Analyst: PAB Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethoxy)lether ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethyl)ether ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-ethylhexyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 4-Bromophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Butyl benzyl phthalate ND 0.4 mg/Kg-dry 1	Dibenz(a,h)anthracene	0.1	0.03			1	12/7/2004
Indeno(1,2,3-cd)pyrene 0.35 0.3 mg/Kg-dry 10 12/8/2004 Naphthalene 22 3 mg/Kg-dry 100 12/8/2004 Phenanthrene 11 3 mg/Kg-dry 100 12/8/2004 Pyrene 4.5 3 mg/Kg-dry 100 12/8/2004 Pyrene 4.5 3 mg/Kg-dry 100 12/8/2004 Semivolatile Organic Compounds by GC/MS SW8270C SW3550B) Prep Date: 12/7/2004 Analyst: PAB Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethyl)ether ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-ethylhexyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 A-Bromophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Butyl benzyl phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Butyl benzyl phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chloro-3-methylphenol ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chloroaniline ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 A-Chloro	Fluoranthene	2.7	0.3		mg/Kg-dry	10	12/8/2004
Naphthalene 22 3 mg/Kg-dry 100 12/8/2004 Phenanthrene 11 3 mg/Kg-dry 100 12/8/2004 Pyrene 4.5 3 mg/Kg-dry 100 12/8/2004 Semivolatile Organic Compounds by GC/MS SW8270C (SW3550B) Prep Date: 12/7/2004 Analyst: PAB Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethyl)ether ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-ethylhexyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 4-Bromophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Butyl benzyl phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Carbazole ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloro-3-methylphenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 <	Fluorene	3.6	3		mg/Kg-dry	100	12/8/2004
Naphthalene 22 3 mg/Kg-dry 100 12/8/2004 Phenanthrene 11 3 mg/Kg-dry 100 12/8/2004 Pyrene 4.5 3 mg/Kg-dry 100 12/8/2004 Semivolatile Organic Compounds by GC/MS SW8270C (SW3550B) Prep Date: 12/7/2004 Analyst: PAB Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethyl)ether ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-ethylhexyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-ethylhexyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-ethylhexyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-ethylhexyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-ethylhexyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Carbazole ND 0.4 mg/Kg-dry 1 12/8/2004 </td <td>Indeno(1,2,3-cd)pyrene</td> <td>0.35</td> <td>0.3</td> <td></td> <td>mg/Kg-dry</td> <td>10</td> <td>12/8/2004</td>	Indeno(1,2,3-cd)pyrene	0.35	0.3		mg/Kg-dry	10	12/8/2004
Semivolatile Organic Compounds by GC/MS SW8270C (SW3550B) Prep Date: 12/7/2004 Analyst: PAB Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethyl)ether ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-ethylhexyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 4-Bromophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Butyl benzyl phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Carbazole ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloro-3-methylphenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloroaniline ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chloronaphthalene ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1		22	3		mg/Kg-dry	100	12/8/2004
Semivolatile Organic Compounds by GC/MS SW8270C (SW3550B) Prep Date: 12/7/2004 Analyst: PAB Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethyl)ether ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-ethylhexyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 4-Bromophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Butyl benzyl phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Carbazole ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloro-3-methylphenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloroaniline ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chloronaphthalene ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1	Phenanthrene	11	3		mg/Kg-dry	100	12/8/2004
Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethyl)ether ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-ethylhexyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 4-Bromophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Butyl benzyl phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Carbazole ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloro-3-methylphenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloroaniline ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chloronaphthalene ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Dibenzofuran 0.91 0.4 mg/Kg-dry 1 12/8/2004 <td>Pyrene</td> <td>4.5</td> <td>3</td> <td></td> <td></td> <td>100</td> <td>12/8/2004</td>	Pyrene	4.5	3			100	12/8/2004
Bis(2-chloroethoxy)methane ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-chloroethyl)ether ND 0.4 mg/Kg-dry 1 12/8/2004 Bis(2-ethylhexyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 4-Bromophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Butyl benzyl phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Carbazole ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloro-3-methylphenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloroaniline ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chloronaphthalene ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Dibenzofuran 0.91 0.4 mg/Kg-dry 1 12/8/2004 <td>Semivolatile Organic Compounds by GC/MS</td> <td>SW82</td> <td>70C (SW</td> <td>/3550B)</td> <td>Prep</td> <td>Date: 12/7/2004</td> <td>Analyst: PAB</td>	Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	/3550B)	Prep	Date: 12/7/2004	Analyst: PAB
Bis(2-ethylhexyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 4-Bromophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Butyl benzyl phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Carbazole ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloro-3-methylphenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloroaniline ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chloronaphthalene ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,2-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,3-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 <td>-</td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td></td>	-			-	-		
Bis(2-ethylhexyl)phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 4-Bromophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Butyl benzyl phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Carbazole ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloro-3-methylphenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloroaniline ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chloronaphthalene ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Dibenzofuran 0.91 0.4 mg/Kg-dry 1 12/8/2004 1,2-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,3-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004	Bis(2-chloroethyl)ether	ND	0.4		mg/Kg-dry	1	12/8/2004
Butyl benzyl phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Carbazole ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloro-3-methylphenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloroaniline ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Dibenzofuran 0.91 0.4 mg/Kg-dry 1 12/8/2004 1,2-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,3-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,4-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004	Bis(2-ethylhexyl)phthalate	ND	0.4			1	12/8/2004
Butyl benzyl phthalate ND 0.4 mg/Kg-dry 1 12/8/2004 Carbazole ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloro-3-methylphenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloroaniline ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Dibenzofuran 0.91 0.4 mg/Kg-dry 1 12/8/2004 1,2-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,3-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,4-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004	4-Bromophenyl phenyl ether	ND	0.4		mg/Kg-dry	1	12/8/2004
Carbazole ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloro-3-methylphenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloroaniline ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chloronaphthalene ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Dibenzofuran 0.91 0.4 mg/Kg-dry 1 12/8/2004 1,2-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,3-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,4-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004		ND	0.4			1	12/8/2004
4-Chloro-3-methylphenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chloroaniline ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chloronaphthalene ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Dibenzofuran 0.91 0.4 mg/Kg-dry 1 12/8/2004 1,2-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,3-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,4-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004	Carbazole	ND	0.4			1	12/8/2004
4-Chloroaniline ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chloronaphthalene ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Dibenzofuran 0.91 0.4 mg/Kg-dry 1 12/8/2004 1,2-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,3-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,4-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004			0.4				
2-Chloronaphthalene ND 0.4 mg/Kg-dry 1 12/8/2004 2-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Dibenzofuran 0.91 0.4 mg/Kg-dry 1 12/8/2004 1,2-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,3-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,4-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004	· · · · · · · · · · · · · · · · · · ·	ND	0.4			1	
2-Chlorophenol ND 0.4 mg/Kg-dry 1 12/8/2004 4-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Dibenzofuran 0.91 0.4 mg/Kg-dry 1 12/8/2004 1,2-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,3-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,4-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004		ND	0.4				
4-Chlorophenyl phenyl ether ND 0.4 mg/Kg-dry 1 12/8/2004 Dibenzofuran 0.91 0.4 mg/Kg-dry 1 12/8/2004 1,2-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,3-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,4-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004	·	ND	0.4			1	12/8/2004
Dibenzofuran 0.91 0.4 mg/Kg-dry 1 12/8/2004 1,2-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,3-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,4-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004	•	ND	0.4			1	
1,2-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,3-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,4-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004	. , , ,						
1,3-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004 1,4-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004			-				
1,4-Dichlorobenzene ND 0.4 mg/Kg-dry 1 12/8/2004	•		-				
	3,3´-Dichlorobenzidine				mg/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

R - RFD outside accepted recovery mini

E - Value above quantitation range H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB52-001

Lab Order: 0412059 **Tag Number:** 6-8'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/2/2004 8:05:00 AM

Lab ID: 0412059-001B **Matrix:** Soil

Analyses	Result	RL Qı	ualifier Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW827	70C (SW355	i0B) Prep	Date: 12/7/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.4	mg/Kg-dry	1	12/8/2004
Diethyl phthalate	ND	0.4	mg/Kg-dry	1	12/8/2004
Dimethyl phthalate	ND	0.4	mg/Kg-dry	1	12/8/2004
Di-n-butyl phthalate	ND	0.4	mg/Kg-dry	1	12/8/2004
2,4-Dimethylphenol	ND	0.4	mg/Kg-dry	1	12/8/2004
4,6-Dinitro-2-methylphenol	ND	1.9	mg/Kg-dry	1	12/8/2004
2,4-Dinitrophenol	ND	1.9	mg/Kg-dry	1	12/8/2004
2,4-Dinitrotoluene	ND	0.21	mg/Kg-dry	1	12/8/2004
2,6-Dinitrotoluene	ND	0.21	mg/Kg-dry	1	12/8/2004
Di-n-octyl phthalate	ND	0.4	mg/Kg-dry	1	12/8/2004
Hexachlorobenzene	ND	0.4	mg/Kg-dry	1	12/8/2004
Hexachlorobutadiene	ND	0.4	mg/Kg-dry	1	12/8/2004
Hexachlorocyclopentadiene	ND	0.4	mg/Kg-dry	1	12/8/2004
Hexachloroethane	ND	0.4	mg/Kg-dry	1	12/8/2004
Isophorone	ND	0.4	mg/Kg-dry	1	12/8/2004
2-Methylnaphthalene	19	2	mg/Kg-dry	5	12/8/2004
2-Methylphenol	ND	0.4	mg/Kg-dry	1	12/8/2004
4-Methylphenol	ND	0.4	mg/Kg-dry	1	12/8/2004
2-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/8/2004
3-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/8/2004
4-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/8/2004
Nitrobenzene	ND	0.21	mg/Kg-dry	1	12/8/2004
2-Nitrophenol	ND	0.4	mg/Kg-dry	1	12/8/2004
4-Nitrophenol	ND	1.9	mg/Kg-dry	1	12/8/2004
N-Nitrosodi-n-propylamine	ND	0.21	mg/Kg-dry	1	12/8/2004
N-Nitrosodiphenylamine	ND	0.4	mg/Kg-dry	1	12/8/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.4	mg/Kg-dry	1	12/8/2004
Pentachlorophenol	ND	1.9	mg/Kg-dry	1	12/8/2004
Phenol	ND	0.4	mg/Kg-dry	1	12/8/2004
1,2,4-Trichlorobenzene	ND	0.4	mg/Kg-dry	1	12/8/2004
2,4,5-Trichlorophenol	ND	0.8	mg/Kg-dry	1	12/8/2004
2,4,6-Trichlorophenol	ND	0.4	mg/Kg-dry	1	12/8/2004
Percent Moisture	D2974		Prep	Date: 12/2/2004	Analyst: RW
Percent Moisture	18.53	0.01	* wt%	1	12/3/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547 Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004

Print Date: December 15, 2004

Client:

Burns & McDonnell

Client Sample ID:

WSS-SB52-002

Lab Order:

0412059

Tag Number: 12-14'

Project:

32088, Willow Street Station-General Iron

Collection Date: 12/2/2004 8:20:00 AM

Lab ID:

0412059-002A

Matrix: Soil

Volatile Organic Compounds by GC/MS SW5035/8260B Prep Date: 12/3/2004 Analyst: PS Acetone ND UT 0.027 mg/Kg-dry 1 12/8/2004 Benzene 0.0089 J 0.0054 mg/Kg-dry 1 12/8/2004 Bromodichloromethane ND UT 0.0054 mg/Kg-dry 1 12/8/2004 Bromoform ND 0.0054 mg/Kg-dry 1 12/8/2004 Bromomethane ND 0.0011 mg/Kg-dry 1 12/8/2004 2-Butanone ND 0.0011 mg/Kg-dry 1 12/8/2004 Carbon disulfide ND 0.0054 mg/Kg-dry 1 12/8/2004 Carbon disulfide ND 0.0054 mg/Kg-dry 1 12/8/2004 Chioroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Chioroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Chioroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Chioroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004	Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Benzene	Volatile Organic Compounds by GC/MS	SW50	35/8260E	B Prep	Date: 12/3	3/2004 Analyst: PS
Bromodichloromethane				mg/Kg-dry		
Bromoform	Benzene	_	0.0054	mg/Kg-dry	1	12/8/2004
Bromomethane ND 0.011 mg/Kg-dry 1 12/8/2004 2-Butanone ND 0.011 mg/Kg-dry 1 12/8/2004 Carbon disulfide ND 0.0054 mg/Kg-dry 1 12/8/2004 Chlorobenzene ND 0.0054 mg/Kg-dry 1 12/8/2004 Chlorobenzene ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloroform ND 0.011 mg/Kg-dry 1 12/8/2004 Chloroform ND 0.011 mg/Kg-dry 1 12/8/2004 Chloroform ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloroform ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Dibromochloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 4-Methyl-2-pentanone ND 0.0054 mg/Kg-dry 1 12/8/2004 4-Methyl-2-pentanone ND 0.0054 mg/Kg-dry 1 12/8/2004 Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 Methyler chloride ND 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.005	Bromodichloromethane	NDUJ	0.0054	mg/Kg-dry	1	12/8/2004
2-Butanone ND 0.011 mg/Kg-dry 1 12/8/2004 Carbon disulfide ND 0.0054 mg/Kg-dry 1 12/8/2004 Carbon disulfide ND 0.0054 mg/Kg-dry 1 12/8/2004 Carbon tetrachloride ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloroethane ND 0.011 mg/Kg-dry 1 12/8/2004 Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Z-Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Z-Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Z-Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Z-Tichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Z-Tichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Z-Tichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Z-Tichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Z-Tichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Z-Tichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Z-Tichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-	Bromoform	ND /	0.0054	mg/Kg-dry	1	12/8/2004
Carbon disulfide ND 0.0054 mg/Kg-dry 1 12/8/2004 Carbon tetrachloride ND 0.0054 mg/Kg-dry 1 12/8/2004 Chlorobenzene ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloroform ND 0.0011 mg/Kg-dry 1 12/8/2004 Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004	Bromomethane	ND	0.011	mg/Kg-dry	1	12/8/2004
Carbon tetrachloride ND 0.0054 mg/Kg-dry 1 12/8/2004 Chlorobenzene ND 0.0054 Mg/Kg-dry 1 12/8/2004 Chloroethane ND 0.011 mg/Kg-dry 1 12/8/2004 Chloroethane ND 0.0054 Mg/Kg-dry 1 12/8/2004 Chloroform ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Dibromochloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 12/8/20	2-Butanone	ND	0.011	mg/Kg-dry	1	12/8/2004
Chlorobenzene ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloroethane ND 0.011 mg/Kg-dry 1 12/8/2004 Chloroform ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,1-1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,1-1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,1-1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Vinyl chloride ND 0.0054 mg/Kg-dry 1 12/8/2004	Carbon disulfide	ND	0.0054	mg/Kg-dry	1.	12/8/2004
Chloroethane ND 0.011 mg/Kg-dry 1 12/8/2004 Chloroform ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Dibromochloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 Ethylbenzene ND 0.0054 mg/Kg-dry 1 12/8/2004 4-Methyl-2-pentanone ND 0.011 mg/Kg-dry 1 12/8/2004 Methylene chloride ND 0.011 mg/Kg-dry 1 12/8/2004 Methyler-butyl ether ND 0.0054 mg/Kg-dry 1 12/8/2004 Methyler-butyl ether ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097	Carbon tetrachloride	ND \	0.0054	mg/Kg-dry	1	12/8/2004
Chloroform ND 0.0054 mg/Kg-dry 1 12/8/2004 Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Dibromochloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 Ethylbenzene ND 0.0054 mg/Kg-dry 1 12/8/2004 Ethylbenzene ND 0.0054 mg/Kg-dry 1 12/8/2004 4-Methyl-2-pentanone ND 0.011 mg/Kg-dry 1 12/8/2004 4-Methyl-2-pentanone ND 0.011 mg/Kg-dry 1 12/8/2004 Methylene chloride ND 0.011 mg/Kg-dry 1 12/8/2004 Methyletr-butyl ether ND 0.0054 mg/Kg-dry 1 12/8/2004 Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004	Chlorobenzene	ND	0.0054	mg/Kg-dry	1	12/8/2004
Chloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Dibromochloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 Ethylbenzene ND 0.0054 mg/Kg-dry 1 12/8/2004 2-Hexanone ND 0.011 mg/Kg-dry 1 12/8/2004	Chloroethane	ND	0.011	mg/Kg-dry	<u> </u>	12/8/2004
Dibromochloromethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Bichloropropane ND 0.0054 mg/Kg-dry 1 <td>Chloroform</td> <td>ND</td> <td>00054</td> <td>mg/Kg-dry</td> <td>1 '</td> <td>12/8/2004</td>	Chloroform	ND	00054	mg/Kg-dry	1 '	12/8/2004
1,1-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 Ethylbenzene 0.043 0.0054 mg/Kg-dry 1 12/8/2004 2-Hexanone ND 0.011 mg/Kg-dry 1 12/8/2004 4-Methyl-2-pentanone ND 0.011 mg/Kg-dry 1 12/8/2004 Methyl tert-butyl ether ND 0.011 mg/Kg-dry 1	Chloromethane	ND	0.0054	mg/Kg-dry	1 -	12/8/2004
1,2-Dichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 Ethylbenzene 0.043 0.0054 mg/Kg-dry 1 12/8/2004 2-Hexanone ND 0.011 mg/Kg-dry 1 12/8/2004 4-Methyl-2-pentanone ND 0.011 mg/Kg-dry 1 12/8/2004 Methylene chloride ND 0.011 mg/Kg-dry 1 12/8/2004 Methyl tert-butyl ether ND 0.0054 mg/Kg-dry 1 12/8/2004 Styrene ND 0.0054 mg/Kg-dry 1 12/8/20	Dibromochloromethane	ND	0.0054	mg/Kg-dry	1 -	12/8/2004
1,1-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 Ethylbenzene 0.043 0.0054 mg/Kg-dry 1 12/8/2004 2-Hexanone ND 0.011 mg/Kg-dry 1 12/8/2004 4-Methyl-2-pentanone ND 0.011 mg/Kg-dry 1 12/8/2004 Methylene chloride ND 0.011 mg/Kg-dry 1 12/8/2004 Methyl tert-butyl ether ND 0.0054 mg/Kg-dry 1 12/8/2004 Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry	1,1-Dichloroethane	ND	0.0054	mg/Kg-dry	1	12/8/2004
cis-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 Ethylbenzene 0.043 0.0054 mg/Kg-dry 1 12/8/2004 2-Hexanone ND 0.011 mg/Kg-dry 1 12/8/2004 4-Methyl-2-pentanone ND 0.011 mg/Kg-dry 1 12/8/2004 Methylene chloride ND 0.011 mg/Kg-dry 1 12/8/2004 Methyl tert-butyl ether ND 0.0054 mg/Kg-dry 1 12/8/2004 Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004	1,2-Dichloroethane	ND	0.0054	mg/Kg-dry	1	12/8/2004
trans-1,2-Dichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 Ethylbenzene 0.043 0.0054 mg/Kg-dry 1 12/8/2004 2-Hexanone ND 0.011 mg/Kg-dry 1 12/8/2004 4-Methyl-2-pentanone ND 0.011 mg/Kg-dry 1 12/8/2004 Methylene chloride ND 0.011 mg/Kg-dry 1 12/8/2004 Methyl tert-butyl ether ND 0.0054 mg/Kg-dry 1 12/8/2004 Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004	1,1-Dichloroethene	ND	0.0054	mg/Kg-dry	1	12/8/2004
1,2-Dichloropropane ND 0.0054 mg/Kg-dry 1 12/8/2004 cis-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 Ethylbenzene 0.043 0.0054 mg/Kg-dry 1 12/8/2004 2-Hexanone ND 0.011 mg/Kg-dry 1 12/8/2004 4-Methyl-2-pentanone ND 0.011 mg/Kg-dry 1 12/8/2004 Methylene chloride ND 0.011 mg/Kg-dry 1 12/8/2004 Methyl tert-butyl ether ND 0.0054 mg/Kg-dry 1 12/8/2004 Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0054 mg/Kg-dry 1 12/8/2004 <tr< td=""><td>cis-1,2-Dichloroethene</td><td>ND</td><td>0.0054</td><td>mg/Kg-dry</td><td>1</td><td>12/8/2004</td></tr<>	cis-1,2-Dichloroethene	ND	0.0054	mg/Kg-dry	1	12/8/2004
cis-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 trans-1,3-Dichloropropene ND 0.0054 mg/Kg-dry 1 12/8/2004 Ethylbenzene 0.043 0.0054 mg/Kg-dry 1 12/8/2004 2-Hexanone ND 0.011 mg/Kg-dry 1 12/8/2004 4-Methyl-2-pentanone ND 0.011 mg/Kg-dry 1 12/8/2004 Methylene chloride ND 0.011 mg/Kg-dry 1 12/8/2004 Methyl tert-butyl ether ND 0.0054 mg/Kg-dry 1 12/8/2004 Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 1,1,1-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/20	trans-1,2-Dichloroethene	ND	0.0054	mg/Kg-dry	1	12/8/2004
trans-1,3-Dichloropropene ND	1,2-Dichloropropane	ND	0.0054	mg/Kg-dry	1	12/8/2004
Ethylbenzene	cis-1,3-Dichloropropene	ND	0.0054	mg/Kg-dry	1	12/8/2004
2-Hexanone ND UJ 0.011 mg/Kg-dry 1 12/8/2004 4-Methyl-2-pentanone ND 0.011 mg/Kg-dry 1 12/8/2004 Methylene chloride ND 0.011 mg/Kg-dry 1 12/8/2004 Methyl tert-butyl ether ND 0.0054 mg/Kg-dry 1 12/8/2004 Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2,2-Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 J 0.0054 mg/Kg-dry 1 12/8/2004 1,1,1-Trichloroethane ND UJ 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004	trans-1,3-Dichloropropene	ND 🗸	0.0054	mg/Kg-dry	1	12/8/2004
4-Methyl-2-pentanone ND 0.011 mg/Kg-dry 1 12/8/2004 Methylene chloride ND 0.011 mg/Kg-dry 1 12/8/2004 Methyl tert-butyl ether ND 0.0054 mg/Kg-dry 1 12/8/2004 Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2,2-Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 1,1,1-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Vinyl chloride ND 0.0054 mg/Kg-dry 1 12/8/2004	Ethylbenzene	0.043 丁	0.0054	mg/Kg-dry	1	12/8/2004
Methylene chloride ND 0.011 mg/Kg-dry 1 12/8/2004 Methyl tert-butyl ether ND 0.0054 mg/Kg-dry 1 12/8/2004 Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2,2-Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 1,1,1-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Vinyl chloride ND 0.0054 mg/Kg-dry 1 12/8/2004	2-Hexanone	ND UJ	0.011	mg/Kg-dry	1	12/8/2004
Methyl tert-butyl ether ND 0.0054 mg/Kg-dry 1 12/8/2004 Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2,2-Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 1,1,1-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Irichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 /inyl chloride ND 0.0054 mg/Kg-dry 1 12/8/2004	4-Methyl-2-pentanone	ND I	0.011	mg/Kg-dry	1	12/8/2004
Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2,2-Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 1,1,1-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 /inyl chloride ND 0.0054 mg/Kg-dry 1 12/8/2004	Methylene chloride	ND	0.011	mg/Kg-dry	1	12/8/2004
Styrene ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2,2-Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 1,1,1-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Frichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Vinyl chloride ND 0.0054 mg/Kg-dry 1 12/8/2004	Methyl tert-butyl ether	ND	0.0054	mg/Kg-dry	1	12/8/2004
1,1,2,2-Tetrachloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Tetrachloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 0.0054 mg/Kg-dry 1 12/8/2004 1,1,1-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Vinyl chloride ND 0.0054 mg/Kg-dry 1 12/8/2004	Styrene	ND	0.0054		1	12/8/2004
Tetrachloroethene ND V 0.0054 mg/Kg-dry 1 12/8/2004 Toluene 0.0097 J 0.0054 mg/Kg-dry 1 12/8/2004 1,1,1-Trichloroethane ND J 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Vinyl chloride ND 0.0054 mg/Kg-dry 1 12/8/2004	1,1,2,2-Tetrachloroethane	ND	0.0054	mg/Kg-dry	1	12/8/2004
Toluene 0.0097 J 0.0054 mg/Kg-dry 1 12/8/2004 1,1,1-Trichloroethane ND UJ 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Vinyl chloride ND 0.0054 mg/Kg-dry 1 12/8/2004	Tetrachloroethene	ND 🖟	0.0054		1	12/8/2004
1,1,1-Trichloroethane ND uJ 0.0054 mg/Kg-dry 1 12/8/2004 1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Vinyl chloride ND 0.0054 mg/Kg-dry 1 12/8/2004	Toluene	0.0097 T	0.0054		1	12/8/2004
1,1,2-Trichloroethane ND 0.0054 mg/Kg-dry 1 12/8/2004 Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Vinyl chloride ND 0.0054 mg/Kg-dry 1 12/8/2004	1,1,1-Trichloroethane				1	12/8/2004
Trichloroethene ND 0.0054 mg/Kg-dry 1 12/8/2004 Vinyl chloride ND 0.0054 mg/Kg-dry 1 12/8/2004	1,1,2-Trichloroethane	ND I	0.0054	-,	1	12/8/2004
Vinyl chloride ND	Trichloroethene					
,		1 .		• • •		
xylenes, Total 0.055 J 0.011 mg/kg-dry 1 12/8/2004 J=estimated value; poor surrogate recovery, SFA UJ=estimated non-detect value; poor surrogate reco	J=estimated value	POOY	Sur	rogate re	cover	ry, SFA

ND - Not Detected at the Reporting Limit

Qualifiers:

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB52-002

Lab Order: 0412059 **Tag Number:** 12-14'

Project: 32088, Willow Street Station-General Iron Collection Date: 12/2/2004 8:20:00 AM

Lab ID: 0412059-002B **Matrix:** Soil

	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW80)15M (SW	/3580A)	Prep	Date: 12/7/20 0)4 Analyst: JF
TPH (Gasoline)	ND	23	* r	ng/Kg-dry	1	12/8/2004
TPH (Diesel)	ND	23	* r	ng/Kg-dry	1	12/8/2004
TPH (Oil)	ND	23	* r	mg/Kg-dry	1	12/8/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550B) Prep	Date: 12/7/200	04 Analyst: VS
Acenaphthene	0.19	0.029	r	ng/Kg-dry	1	12/7/2004
Acenaphthylene	0.066	0.029	r	ng/Kg-dry	1	12/7/2004
Anthracene	0.12	0.029	r	ng/Kg-dry	1	12/7/2004
Benz(a)anthracene	0.091	0.029	r	mg/Kg-dry	1	12/7/2004
Benzo(b)fluoranthene	0.038	0.029	r	mg/Kg-dry	1	12/7/2004
Benzo(k)fluoranthene	0.035	0.029	r	ng/Kg-dry	1	12/7/2004
Benzo(g,h,i)perylene	ND	0.029	r	ng/Kg-dry	1	12/7/2004
Benzo(a)pyrene	0.07	0.029	r	ng/Kg-dry	1	12/7/2004
Chrysene	0.096	0.029	r	ng/Kg-dry	1	12/7/2004
Dibenz(a,h)anthracene	ND	0.029	r	ng/Kg-dry	1	12/7/2004
Fluoranthene	0.15	0.029	r	ng/Kg-dry	1	12/7/2004
Fluorene	0.2	0.029	r	ng/Kg-dry	1	12/7/2004
Indeno(1,2,3-cd)pyrene	ND	0.029	r	ng/Kg-dry	1	12/7/2004
Naphthalene	2.3	0.29	r	ng/Kg-dry	10	12/8/2004
Phenanthrene	0.65	0.29	r	ng/Kg-dry	10	12/8/2004
Pyrene	0.22	0.029		mg/Kg-dry	1	12/7/2004
Semivolatile Organic Compounds by GC/MS	S SW82	270C (SW	/3550B)	Prep	Date: 12/7/200	04 Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.39		ng/Kg-dry	1	12/8/2004
Bis(2-chloroethyl)ether	ND	0.39	r	ng/Kg-dry	1	12/8/2004
Bis(2-ethylhexyl)phthalate	ND	0.39	r	ng/Kg-dry	1	12/8/2004
4-Bromophenyl phenyl ether	ND	0.39	r	ng/Kg-dry	1	12/8/2004
Butyl benzyl phthalate	ND	0.39	r	ng/Kg-dry	1	12/8/2004
Carbazole	ND	0.39		ng/Kg-dry	1	12/8/2004
4-Chloro-3-methylphenol	ND	0.39		ng/Kg-dry	1	12/8/2004
4-Chloroaniline	ND	0.39		ng/Kg-dry	1	12/8/2004
2-Chloronaphthalene	ND	0.39		ng/Kg-dry	1	12/8/2004
2-Chlorophenol	ND	0.39		ng/Kg-dry	1	12/8/2004
4-Chlorophenyl phenyl ether	ND	0.39		ng/Kg-dry	1	12/8/2004
Dibenzofuran	ND	0.39		ng/Kg-dry	1	12/8/2004
1,2-Dichlorobenzene	ND	0.39		ng/Kg-dry	1	12/8/2004
1,3-Dichlorobenzene	ND	0.39		ng/Kg-dry	1	12/8/2004
1,4-Dichlorobenzene	ND	0.39		ng/Kg-dry	1	12/8/2004
3,3'-Dichlorobenzidine	ND	0.77		ng/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

K - Ki D outside accepted recovery iiii

E - Value above quantitation range H - Holding time exceeded Page 5 of 30

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB52-002

Lab Order: 0412059 **Tag Number:** 12-14'

Project: 32088, Willow Street Station-General Iron Collection Date: 12/2/2004 8:20:00 AM

Lab ID: 0412059-002B **Matrix:** Soil

Analyses	Result	RL Q	ualifier Units	DF I	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW35	50B) Prep	Date: 12/7/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.39	mg/Kg-dry	1	12/8/2004
Diethyl phthalate	ND	0.39	mg/Kg-dry	1	12/8/2004
Dimethyl phthalate	ND	0.39	mg/Kg-dry	1	12/8/2004
Di-n-butyl phthalate	ND	0.39	mg/Kg-dry	1	12/8/2004
2,4-Dimethylphenol	ND	0.39	mg/Kg-dry	1	12/8/2004
4,6-Dinitro-2-methylphenol	ND	1.9	mg/Kg-dry	1	12/8/2004
2,4-Dinitrophenol	ND	1.9	mg/Kg-dry	1	12/8/2004
2,4-Dinitrotoluene	ND	0.2	mg/Kg-dry	1	12/8/2004
2,6-Dinitrotoluene	ND	0.2	mg/Kg-dry	1	12/8/2004
Di-n-octyl phthalate	ND	0.39	mg/Kg-dry	1	12/8/2004
Hexachlorobenzene	ND	0.39	mg/Kg-dry	1	12/8/2004
Hexachlorobutadiene	ND	0.39	mg/Kg-dry	1	12/8/2004
Hexachlorocyclopentadiene	ND	0.39	mg/Kg-dry	1	12/8/2004
Hexachloroethane	ND	0.39	mg/Kg-dry	1	12/8/2004
Isophorone	ND	0.39	mg/Kg-dry	1	12/8/2004
2-Methylnaphthalene	1.8	0.39	mg/Kg-dry	1	12/8/2004
2-Methylphenol	ND	0.39	mg/Kg-dry	1	12/8/2004
4-Methylphenol	ND	0.39	mg/Kg-dry	1	12/8/2004
2-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/8/2004
3-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/8/2004
4-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/8/2004
Nitrobenzene	ND	0.2	mg/Kg-dry	1	12/8/2004
2-Nitrophenol	ND	0.39	mg/Kg-dry	1	12/8/2004
4-Nitrophenol	ND	1.9	mg/Kg-dry	1	12/8/2004
N-Nitrosodi-n-propylamine	ND	0.2	mg/Kg-dry	1	12/8/2004
N-Nitrosodiphenylamine	ND	0.39	mg/Kg-dry	1	12/8/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.39	mg/Kg-dry	1	12/8/2004
Pentachlorophenol	ND	1.9	mg/Kg-dry	1	12/8/2004
Phenol	ND	0.39	mg/Kg-dry	1	12/8/2004
1,2,4-Trichlorobenzene	ND	0.39	mg/Kg-dry	1	12/8/2004
2,4,5-Trichlorophenol	ND	0.77	mg/Kg-dry	1	12/8/2004
2,4,6-Trichlorophenol	ND	0.39	mg/Kg-dry	1	12/8/2004
Percent Moisture	D2974	4	Prep	Date: 12/2/2004	Analyst: RW
Percent Moisture	14.85	0.01	* wt%	1	12/3/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client:** Client Sample ID: WSS-SB55-001

Lab Order: 0412059 Tag Number:

Project: 32088, Willow Street Station-General Iron **Collection Date:** 12/2/2004 9:25:00 AM

Lab ID: 0412059-003A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50	35/8260E	B Prep	Date: 12/3/2004	Analyst: PS
Acetone	0.026	0.025	mg/Kg-dry	1	12/8/2004
Benzene	0.064	0.005	mg/Kg-dry	1	12/8/2004
Bromodichloromethane	ND	0.005	mg/Kg-dry	1	12/8/2004
Bromoform	ND	0.005	mg/Kg-dry	1	12/8/2004
Bromomethane	ND	0.01	mg/Kg-dry	1	12/8/2004
2-Butanone	ND	0.01	mg/Kg-dry	1	12/8/2004
Carbon disulfide	ND	0.005	mg/Kg-dry	1	12/8/2004
Carbon tetrachloride	ND	0.005	mg/Kg-dry	1	12/8/2004
Chlorobenzene	ND	0.005	mg/Kg-dry	1	12/8/2004
Chloroethane	ND	0.01	mg/Kg-dry	1	12/8/2004
Chloroform	ND	0.005	mg/Kg-dry	1	12/8/2004
Chloromethane	ND	0.005	mg/Kg-dry	1	12/8/2004
Dibromochloromethane	ND	0.005	mg/Kg-dry	1	12/8/2004
1,1-Dichloroethane	ND	0.005	mg/Kg-dry	1	12/8/2004
1,2-Dichloroethane	ND	0.005	mg/Kg-dry	1	12/8/2004
1,1-Dichloroethene	ND	0.005	mg/Kg-dry	1	12/8/2004
cis-1,2-Dichloroethene	ND	0.005	mg/Kg-dry	1	12/8/2004
trans-1,2-Dichloroethene	ND	0.005	mg/Kg-dry	1	12/8/2004
1,2-Dichloropropane	ND	0.005	mg/Kg-dry	1	12/8/2004
cis-1,3-Dichloropropene	ND	0.005	mg/Kg-dry	1	12/8/2004
trans-1,3-Dichloropropene	ND	0.005	mg/Kg-dry	1	12/8/2004
Ethylbenzene	0.11	0.005	mg/Kg-dry	1	12/8/2004
2-Hexanone	ND	0.01	mg/Kg-dry	1	12/8/2004
4-Methyl-2-pentanone	ND	0.01	mg/Kg-dry	1	12/8/2004
Methylene chloride	ND	0.01	mg/Kg-dry	1	12/8/2004
Methyl tert-butyl ether	ND	0.005	mg/Kg-dry	1	12/8/2004
Styrene	0.016	0.005	mg/Kg-dry	1	12/8/2004
1,1,2,2-Tetrachloroethane	ND	0.005	mg/Kg-dry	1	12/8/2004
Tetrachloroethene	ND	0.005	mg/Kg-dry	1	12/8/2004
Toluene	0.066	0.005	mg/Kg-dry	1	12/8/2004
1,1,1-Trichloroethane	ND	0.005	mg/Kg-dry	1	12/8/2004
1,1,2-Trichloroethane	ND	0.005	mg/Kg-dry	1	12/8/2004
Trichloroethene	ND	0.005	mg/Kg-dry	1	12/8/2004
Vinyl chloride	ND	0.005	mg/Kg-dry	1	12/8/2004
Xylenes, Total	0.18	0.01	mg/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB55-001

Lab Order: 0412059 **Tag Number:** 6-8'

Project: 32088, Willow Street Station-General Iron Collection Date: 12/2/2004 9:25:00 AM

Lab ID: 0412059-003B **Matrix:** Soil

Acenaphthylene Anthracene		23 23 23	*	Prep mg/Kg-dry mg/Kg-dry	Date: 12/7/2004	Analyst: JF 12/8/2004
TPH (Diesel) TPH (Oil) Polynuclear Aromatic Hydrocarbons Acenaphthene Acenaphthylene Anthracene	ND 27 SW827 (23 23	*	0 0 ,	1	12/8/2004
TPH (Oil) Polynuclear Aromatic Hydrocarbons Acenaphthene Acenaphthylene Anthracene	27 SW827 (23		mg/Kg-drv		12/0/2004
Polynuclear Aromatic Hydrocarbons Acenaphthene Acenaphthylene Anthracene	SW8270		*	5 5 7	1	12/8/2004
Acenaphthene Acenaphthylene Anthracene		OC CURA		mg/Kg-dry	1	12/8/2004
Acenaphthylene Anthracene		7C-2IIN	(SW3550E	B) Prep	Date: 12/7/2004	Analyst: VS
Anthracene	0.078	0.029		mg/Kg-dry	1	12/7/2004
	0.089	0.029		mg/Kg-dry	1	12/7/2004
	0.099	0.029		mg/Kg-dry	1	12/7/2004
Benz(a)anthracene	0.098	0.029		mg/Kg-dry	1	12/7/2004
Benzo(b)fluoranthene	0.054	0.029		mg/Kg-dry	1	12/7/2004
Benzo(k)fluoranthene	0.05	0.029		mg/Kg-dry	1	12/7/2004
Benzo(g,h,i)perylene	0.033	0.029		mg/Kg-dry	1	12/7/2004
Benzo(a)pyrene	0.092	0.029		mg/Kg-dry	1	12/7/2004
Chrysene	0.1	0.029		mg/Kg-dry	1	12/7/2004
Dibenz(a,h)anthracene	ND	0.029		mg/Kg-dry	1	12/7/2004
Fluoranthene	0.16	0.029		mg/Kg-dry	1	12/7/2004
Fluorene	0.15	0.029		mg/Kg-dry	1	12/7/2004
Indeno(1,2,3-cd)pyrene	ND	0.029		mg/Kg-dry	1	12/7/2004
Naphthalene	0.95	0.29		mg/Kg-dry	10	12/8/2004
Phenanthrene	0.58	0.29		mg/Kg-dry	10	12/8/2004
Pyrene	0.31	0.29		mg/Kg-dry	10	12/8/2004
Semivolatile Organic Compounds by GC/MS	SW827	OC (SW	3550B)	Prep	Date: 12/7/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.39		mg/Kg-dry	1	12/8/2004
Bis(2-chloroethyl)ether	ND	0.39		mg/Kg-dry	1	12/8/2004
Bis(2-ethylhexyl)phthalate	ND	0.39		mg/Kg-dry	1	12/8/2004
4-Bromophenyl phenyl ether	ND	0.39		mg/Kg-dry	1	12/8/2004
Butyl benzyl phthalate	ND	0.39		mg/Kg-dry	1	12/8/2004
Carbazole	ND	0.39		mg/Kg-dry	1	12/8/2004
4-Chloro-3-methylphenol	ND	0.39		mg/Kg-dry	1	12/8/2004
4-Chloroaniline	ND	0.39		mg/Kg-dry	1	12/8/2004
2-Chloronaphthalene	ND	0.39		mg/Kg-dry	1	12/8/2004
2-Chlorophenol	ND	0.39		mg/Kg-dry	1	12/8/2004
4-Chlorophenyl phenyl ether	ND	0.39		mg/Kg-dry	1	12/8/2004
Dibenzofuran	ND	0.39		mg/Kg-dry	1	12/8/2004
1,2-Dichlorobenzene	ND	0.39		mg/Kg-dry	1	12/8/2004
1,3-Dichlorobenzene	ND	0.39		mg/Kg-dry	1	12/8/2004
1,4-Dichlorobenzene	ND	0.39		mg/Kg-dry	1	12/8/2004
3,3'-Dichlorobenzidine	ND	0.79		mg/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 8 of 30

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client:** Client Sample ID: WSS-SB55-001

Lab Order: 0412059 Tag Number:

Project: 32088, Willow Street Station-General Iron **Collection Date:** 12/2/2004 9:25:00 AM

Lab ID: 0412059-003B **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF I	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW3	3550B) Prep	Date: 12/7/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.39	mg/Kg-dry	1	12/8/2004
Diethyl phthalate	ND	0.39	mg/Kg-dry	1	12/8/2004
Dimethyl phthalate	ND	0.39	mg/Kg-dry	1	12/8/2004
Di-n-butyl phthalate	ND	0.39	mg/Kg-dry	1	12/8/2004
2,4-Dimethylphenol	ND	0.39	mg/Kg-dry	1	12/8/2004
4,6-Dinitro-2-methylphenol	ND	1.9	mg/Kg-dry	1	12/8/2004
2,4-Dinitrophenol	ND	1.9	mg/Kg-dry	1	12/8/2004
2,4-Dinitrotoluene	ND	0.2	mg/Kg-dry	1	12/8/2004
2,6-Dinitrotoluene	ND	0.2	mg/Kg-dry	1	12/8/2004
Di-n-octyl phthalate	ND	0.39	mg/Kg-dry	1	12/8/2004
Hexachlorobenzene	ND	0.39	mg/Kg-dry	1	12/8/2004
Hexachlorobutadiene	ND	0.39	mg/Kg-dry	1	12/8/2004
Hexachlorocyclopentadiene	ND	0.39	mg/Kg-dry	1	12/8/2004
Hexachloroethane	ND	0.39	mg/Kg-dry	1	12/8/2004
Isophorone	ND	0.39	mg/Kg-dry	1	12/8/2004
2-Methylnaphthalene	8.0	0.39	mg/Kg-dry	1	12/8/2004
2-Methylphenol	ND	0.39	mg/Kg-dry	1	12/8/2004
4-Methylphenol	ND	0.39	mg/Kg-dry	1	12/8/2004
2-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/8/2004
3-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/8/2004
4-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/8/2004
Nitrobenzene	ND	0.2	mg/Kg-dry	1	12/8/2004
2-Nitrophenol	ND	0.39	mg/Kg-dry	1	12/8/2004
4-Nitrophenol	ND	1.9	mg/Kg-dry	1	12/8/2004
N-Nitrosodi-n-propylamine	ND	0.2	mg/Kg-dry	1	12/8/2004
N-Nitrosodiphenylamine	ND	0.39	mg/Kg-dry	1	12/8/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.39	mg/Kg-dry	1	12/8/2004
Pentachlorophenol	ND	1.9	mg/Kg-dry	1	12/8/2004
Phenol	ND	0.39	mg/Kg-dry	1	12/8/2004
1,2,4-Trichlorobenzene	ND	0.39	mg/Kg-dry	1	12/8/2004
2,4,5-Trichlorophenol	ND	0.79	mg/Kg-dry	1	12/8/2004
2,4,6-Trichlorophenol	ND	0.39	mg/Kg-dry	1	12/8/2004
Percent Moisture	D2974	4	Prep	Date: 12/3/2004	Analyst: RW
Percent Moisture	16.17	0.01	* wt%	1	12/4/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client:** Client Sample ID: WSS-SB55-002

Lab Order: 0412059 Tag Number: 12-14'

Project: 32088, Willow Street Station-General Iron **Collection Date:** 12/2/2004 9:35:00 AM

Lab ID: 0412059-004A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50)35/8260E	B Prep	Date: 12/3/2004	Analyst: PS
Acetone	ND	0.032	mg/Kg-dry	1	12/8/2004
Benzene	ND	0.0064	mg/Kg-dry	1	12/8/2004
Bromodichloromethane	ND	0.0064	mg/Kg-dry	1	12/8/2004
Bromoform	ND	0.0064	mg/Kg-dry	1	12/8/2004
Bromomethane	ND	0.013	mg/Kg-dry	1	12/8/2004
2-Butanone	ND	0.013	mg/Kg-dry	1	12/8/2004
Carbon disulfide	ND	0.0064	mg/Kg-dry	1	12/8/2004
Carbon tetrachloride	ND	0.0064	mg/Kg-dry	1	12/8/2004
Chlorobenzene	ND	0.0064	mg/Kg-dry	1	12/8/2004
Chloroethane	ND	0.013	mg/Kg-dry	1	12/8/2004
Chloroform	ND	0.0064	mg/Kg-dry	1	12/8/2004
Chloromethane	ND	0.0064	mg/Kg-dry	1	12/8/2004
Dibromochloromethane	ND	0.0064	mg/Kg-dry	1	12/8/2004
1,1-Dichloroethane	ND	0.0064	mg/Kg-dry	1	12/8/2004
1,2-Dichloroethane	ND	0.0064	mg/Kg-dry	1	12/8/2004
1,1-Dichloroethene	ND	0.0064	mg/Kg-dry	1	12/8/2004
cis-1,2-Dichloroethene	ND	0.0064	mg/Kg-dry	1	12/8/2004
trans-1,2-Dichloroethene	ND	0.0064	mg/Kg-dry	1	12/8/2004
1,2-Dichloropropane	ND	0.0064	mg/Kg-dry	1	12/8/2004
cis-1,3-Dichloropropene	ND	0.0064	mg/Kg-dry	1	12/8/2004
trans-1,3-Dichloropropene	ND	0.0064	mg/Kg-dry	1	12/8/2004
Ethylbenzene	ND	0.0064	mg/Kg-dry	1	12/8/2004
2-Hexanone	ND	0.013	mg/Kg-dry	1	12/8/2004
4-Methyl-2-pentanone	ND	0.013	mg/Kg-dry	1	12/8/2004
Methylene chloride	ND	0.013	mg/Kg-dry	1	12/8/2004
Methyl tert-butyl ether	ND	0.0064	mg/Kg-dry	1	12/8/2004
Styrene	ND	0.0064	mg/Kg-dry	1	12/8/2004
1,1,2,2-Tetrachloroethane	ND	0.0064	mg/Kg-dry	1	12/8/2004
Tetrachloroethene	ND	0.0064	mg/Kg-dry	1	12/8/2004
Toluene	ND	0.0064	mg/Kg-dry	1	12/8/2004
1,1,1-Trichloroethane	ND	0.0064	mg/Kg-dry	1	12/8/2004
1,1,2-Trichloroethane	ND	0.0064	mg/Kg-dry	1	12/8/2004
Trichloroethene	ND	0.0064	mg/Kg-dry	1	12/8/2004
Vinyl chloride	ND	0.0064	mg/Kg-dry	1	12/8/2004
Xylenes, Total	ND	0.013	mg/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Page 10 of 30 H - Holding time exceeded

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB55-002

Lab Order: 0412059 **Tag Number:** 12-14'

Project: 32088, Willow Street Station- General Iron **Collection Date:** 12/2/2004 9:35:00 AM

Lab ID: 0412059-004B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SV	/3580A)	Prep	Date: 12/7/200 4	Analyst: JF
TPH (Gasoline)	ND	22	-	ng/Kg-dry	1	12/8/2004
TPH (Diesel)	ND	22	* r	ng/Kg-dry	1	12/8/2004
TPH (Oil)	ND	22	* r	ng/Kg-dry	1	12/8/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550B) Prep	Date: 12/7/2004	Analyst: VS
Acenaphthene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Acenaphthylene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Anthracene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Benz(a)anthracene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Benzo(b)fluoranthene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Benzo(k)fluoranthene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Benzo(g,h,i)perylene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Benzo(a)pyrene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Chrysene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Dibenz(a,h)anthracene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Fluoranthene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Fluorene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Indeno(1,2,3-cd)pyrene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Naphthalene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Phenanthrene	0.067	0.03	r	ng/Kg-dry	1	12/7/2004
Pyrene	ND	0.03	r	ng/Kg-dry	1	12/7/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	/3550B)	Prep	Date: 12/7/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.4	-	ng/Kg-dry	1	12/8/2004
Bis(2-chloroethyl)ether	ND	0.4	r	ng/Kg-dry	1	12/8/2004
Bis(2-ethylhexyl)phthalate	ND	0.4	r	ng/Kg-dry	1	12/8/2004
4-Bromophenyl phenyl ether	ND	0.4		ng/Kg-dry	1	12/8/2004
Butyl benzyl phthalate	ND	0.4		ng/Kg-dry	1	12/8/2004
Carbazole	ND	0.4		ng/Kg-dry	1	12/8/2004
4-Chloro-3-methylphenol	ND	0.4		ng/Kg-dry	1	12/8/2004
4-Chloroaniline	ND	0.4		ng/Kg-dry	1	12/8/2004
2-Chloronaphthalene	ND	0.4		ng/Kg-dry	1	12/8/2004
2-Chlorophenol	ND	0.4		ng/Kg-dry	1	12/8/2004
4-Chlorophenyl phenyl ether	ND	0.4		ng/Kg-dry	1	12/8/2004
Dibenzofuran	ND	0.4		ng/Kg-dry	1	12/8/2004
1,2-Dichlorobenzene	ND	0.4		ng/Kg-dry	1	12/8/2004
1,3-Dichlorobenzene	ND	0.4		ng/Kg-dry	1	12/8/2004
1,4-Dichlorobenzene	ND	0.4		ng/Kg-dry	1	12/8/2004
3,3'-Dichlorobenzidine	ND	0.81		ng/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded Pag

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB55-002

Lab Order: 0412059 **Tag Number:** 12-14'

Project: 32088, Willow Street Station- General Iron **Collection Date:** 12/2/2004 9:35:00 AM

Lab ID: 0412059-004B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF I	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	3550B)	Prep	Date: 12/7/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.4	m	g/Kg-dry	1	12/8/2004
Diethyl phthalate	ND	0.4	m	g/Kg-dry	1	12/8/2004
Dimethyl phthalate	ND	0.4	m	g/Kg-dry	1	12/8/2004
Di-n-butyl phthalate	ND	0.4	m	g/Kg-dry	1	12/8/2004
2,4-Dimethylphenol	ND	0.4	m	g/Kg-dry	1	12/8/2004
4,6-Dinitro-2-methylphenol	ND	2	m	g/Kg-dry	1	12/8/2004
2,4-Dinitrophenol	ND	2	m	g/Kg-dry	1	12/8/2004
2,4-Dinitrotoluene	ND	0.21	m	g/Kg-dry	1	12/8/2004
2,6-Dinitrotoluene	ND	0.21	m	g/Kg-dry	1	12/8/2004
Di-n-octyl phthalate	ND	0.4	m	g/Kg-dry	1	12/8/2004
Hexachlorobenzene	ND	0.4	m	g/Kg-dry	1	12/8/2004
Hexachlorobutadiene	ND	0.4	m	g/Kg-dry	1	12/8/2004
Hexachlorocyclopentadiene	ND	0.4	m	g/Kg-dry	1	12/8/2004
Hexachloroethane	ND	0.4	m	g/Kg-dry	1	12/8/2004
Isophorone	ND	0.4	m	g/Kg-dry	1	12/8/2004
2-Methylnaphthalene	ND	0.4	m	g/Kg-dry	1	12/8/2004
2-Methylphenol	ND	0.4	m	g/Kg-dry	1	12/8/2004
4-Methylphenol	ND	0.4	m	g/Kg-dry	1	12/8/2004
2-Nitroaniline	ND	2	m	g/Kg-dry	1	12/8/2004
3-Nitroaniline	ND	2	m	g/Kg-dry	1	12/8/2004
4-Nitroaniline	ND	2	m	g/Kg-dry	1	12/8/2004
Nitrobenzene	ND	0.21	m	g/Kg-dry	1	12/8/2004
2-Nitrophenol	ND	0.4	m	g/Kg-dry	1	12/8/2004
4-Nitrophenol	ND	2	m	g/Kg-dry	1	12/8/2004
N-Nitrosodi-n-propylamine	ND	0.21	m	g/Kg-dry	1	12/8/2004
N-Nitrosodiphenylamine	ND	0.4	m	g/Kg-dry	1	12/8/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.4	m	g/Kg-dry	1	12/8/2004
Pentachlorophenol	ND	2	m	g/Kg-dry	1	12/8/2004
Phenol	ND	0.4	m	g/Kg-dry	1	12/8/2004
1,2,4-Trichlorobenzene	ND	0.4	m	g/Kg-dry	1	12/8/2004
2,4,5-Trichlorophenol	ND	0.81	m	g/Kg-dry	1	12/8/2004
2,4,6-Trichlorophenol	ND	0.4	m	g/Kg-dry	1	12/8/2004
Percent Moisture	D2974				Date: 12/3/2004	Analyst: RW
Percent Moisture	19.05	0.01	*	wt%	1	12/4/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded Page 12 of 30

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB54-001

Lab Order: 0412059 **Tag Number:** 8-10'

Project: 32088, Willow Street Station-General Iron Collection Date: 12/2/2004 10:40:00 AM

Lab ID: 0412059-005A **Matrix:** Soil

Analyses	Result	RL (Qualifier Units	DF I	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50	35/8260B	Prep	Date: 12/3/2004	Analyst: PS
Acetone	ND	3.2	mg/Kg-dry	100	12/8/2004
Benzene	5.7	0.64	mg/Kg-dry	100	12/8/2004
Bromodichloromethane	ND	0.64	mg/Kg-dry	100	12/8/2004
Bromoform	ND	0.64	mg/Kg-dry	100	12/8/2004
Bromomethane	ND	1.3	mg/Kg-dry	100	12/8/2004
2-Butanone	ND	1.3	mg/Kg-dry	100	12/8/2004
Carbon disulfide	ND	0.64	mg/Kg-dry	100	12/8/2004
Carbon tetrachloride	ND	0.64	mg/Kg-dry	100	12/8/2004
Chlorobenzene	ND	0.64	mg/Kg-dry	100	12/8/2004
Chloroethane	ND	1.3	mg/Kg-dry	100	12/8/2004
Chloroform	ND	0.64	mg/Kg-dry	100	12/8/2004
Chloromethane	ND	0.64	mg/Kg-dry	100	12/8/2004
Dibromochloromethane	ND	0.64	mg/Kg-dry	100	12/8/2004
1,1-Dichloroethane	ND	0.64	mg/Kg-dry	100	12/8/2004
1,2-Dichloroethane	ND	0.64	mg/Kg-dry	100	12/8/2004
1,1-Dichloroethene	ND	0.64	mg/Kg-dry	100	12/8/2004
cis-1,2-Dichloroethene	ND	0.64	mg/Kg-dry	100	12/8/2004
trans-1,2-Dichloroethene	ND	0.64	mg/Kg-dry	100	12/8/2004
1,2-Dichloropropane	ND	0.64	mg/Kg-dry	100	12/8/2004
cis-1,3-Dichloropropene	ND	0.64	mg/Kg-dry	100	12/8/2004
trans-1,3-Dichloropropene	ND	0.64	mg/Kg-dry	100	12/8/2004
Ethylbenzene	25	0.64	mg/Kg-dry	100	12/8/2004
2-Hexanone	ND	1.3	mg/Kg-dry	100	12/8/2004
4-Methyl-2-pentanone	ND	1.3	mg/Kg-dry	100	12/8/2004
Methylene chloride	ND	1.3	mg/Kg-dry	100	12/8/2004
Methyl tert-butyl ether	ND	0.64	mg/Kg-dry	100	12/8/2004
Styrene	ND	0.64	mg/Kg-dry	100	12/8/2004
1,1,2,2-Tetrachloroethane	ND	0.64	mg/Kg-dry	100	12/8/2004
Tetrachloroethene	ND	0.64	mg/Kg-dry	100	12/8/2004
Toluene	0.84	0.64	mg/Kg-dry	100	12/8/2004
1,1,1-Trichloroethane	ND	0.64	mg/Kg-dry	100	12/8/2004
1,1,2-Trichloroethane	ND	0.64	mg/Kg-dry	100	12/8/2004
Trichloroethene	ND	0.64	mg/Kg-dry	100	12/8/2004
Vinyl chloride	ND	0.64	mg/Kg-dry	100	12/8/2004
Xylenes, Total	8.7	1.3	mg/Kg-dry	100	12/8/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB54-001

Lab Order: 0412059 **Tag Number:** 8-10'

Project: 32088, Willow Street Station-General Iron Collection Date: 12/2/2004 10:40:00 AM

Lab ID: 0412059-005B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SV	/3580A)	Prep	Date: 12/7/2004	Analyst: JF
TPH (Gasoline)	37	25	•	ng/Kg-dry	1	12/8/2004
TPH (Diesel)	250	25	* r	mg/Kg-dry	1	12/8/2004
TPH (Oil)	140	25	* r	mg/Kg-dry	1	12/8/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550B	B) Prep	Date: 12/7/2004	Analyst: VS
Acenaphthene	12	3.2	r	ng/Kg-dry	100	12/8/2004
Acenaphthylene	4	3.2	r	mg/Kg-dry	100	12/8/2004
Anthracene	7.4	3.2	r	mg/Kg-dry	100	12/8/2004
Benz(a)anthracene	5.4	3.2	r	mg/Kg-dry	100	12/8/2004
Benzo(b)fluoranthene	2.6	0.32	r	mg/Kg-dry	10	12/8/2004
Benzo(k)fluoranthene	2.1	0.32	r	mg/Kg-dry	10	12/8/2004
Benzo(g,h,i)perylene	1.8	0.32	r	mg/Kg-dry	10	12/8/2004
Benzo(a)pyrene	4.8	3.2	r	mg/Kg-dry	100	12/8/2004
Chrysene	5.3	3.2	r	mg/Kg-dry	100	12/8/2004
Dibenz(a,h)anthracene	0.6	0.32	r	mg/Kg-dry	10	12/8/2004
Fluoranthene	9.6	3.2	r	mg/Kg-dry	100	12/8/2004
Fluorene	9.3	3.2	r	mg/Kg-dry	100	12/8/2004
Indeno(1,2,3-cd)pyrene	1.6	0.32	r	mg/Kg-dry	10	12/8/2004
Naphthalene	110	32	r	mg/Kg-dry	1000	12/9/2004
Phenanthrene	27	3.2	r	mg/Kg-dry	100	12/8/2004
Pyrene	14	3.2	r	mg/Kg-dry	100	12/8/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	/3550B)	Prep	Date: 12/7/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.42	=	ng/Kg-dry	1	12/8/2004
Bis(2-chloroethyl)ether	ND	0.42	r	mg/Kg-dry	1	12/8/2004
Bis(2-ethylhexyl)phthalate	ND	0.42	r	ng/Kg-dry	1	12/8/2004
4-Bromophenyl phenyl ether	ND	0.42		ng/Kg-dry	1	12/8/2004
Butyl benzyl phthalate	ND	0.42		mg/Kg-dry	1	12/8/2004
Carbazole	0.51	0.42		mg/Kg-dry	1	12/8/2004
4-Chloro-3-methylphenol	ND	0.42		ng/Kg-dry	1	12/8/2004
4-Chloroaniline	ND	0.42		ng/Kg-dry	1	12/8/2004
2-Chloronaphthalene	ND	0.42		mg/Kg-dry	1	12/8/2004
2-Chlorophenol	ND	0.42		ng/Kg-dry	1	12/8/2004
4-Chlorophenyl phenyl ether	ND	0.42		ng/Kg-dry	1	12/8/2004
Dibenzofuran	1.9	0.42		ng/Kg-dry	1	12/8/2004
1,2-Dichlorobenzene	ND	0.42		ng/Kg-dry	1	12/8/2004
1,3-Dichlorobenzene	ND	0.42		ng/Kg-dry	1	12/8/2004
1,4-Dichlorobenzene	ND	0.42		ng/Kg-dry	1	12/8/2004
3,3´-Dichlorobenzidine	ND	0.84		mg/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB54-001

Lab Order: 0412059 **Tag Number:** 8-10'

Project: 32088, Willow Street Station-General Iron Collection Date: 12/2/2004 10:40:00 AM

Lab ID: 0412059-005B **Matrix:** Soil

Analyses	Result	RL (Qualifier Units	DF I	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW3	550B) Prep	Date: 12/7/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.42	mg/Kg-dry	1	12/8/2004
Diethyl phthalate	ND	0.42	mg/Kg-dry	1	12/8/2004
Dimethyl phthalate	ND	0.42	mg/Kg-dry	1	12/8/2004
Di-n-butyl phthalate	ND	0.42	mg/Kg-dry	1	12/8/2004
2,4-Dimethylphenol	ND	0.42	mg/Kg-dry	1	12/8/2004
4,6-Dinitro-2-methylphenol	ND	2	mg/Kg-dry	1	12/8/2004
2,4-Dinitrophenol	ND	2	mg/Kg-dry	1	12/8/2004
2,4-Dinitrotoluene	ND	0.22	mg/Kg-dry	1	12/8/2004
2,6-Dinitrotoluene	ND	0.22	mg/Kg-dry	1	12/8/2004
Di-n-octyl phthalate	ND	0.42	mg/Kg-dry	1	12/8/2004
Hexachlorobenzene	ND	0.42	mg/Kg-dry	1	12/8/2004
Hexachlorobutadiene	ND	0.42	mg/Kg-dry	1	12/8/2004
Hexachlorocyclopentadiene	ND	0.42	mg/Kg-dry	1	12/8/2004
Hexachloroethane	ND	0.42	mg/Kg-dry	1	12/8/2004
Isophorone	ND	0.42	mg/Kg-dry	1	12/8/2004
2-Methylnaphthalene	45	4.2	mg/Kg-dry	10	12/8/2004
2-Methylphenol	ND	0.42	mg/Kg-dry	1	12/8/2004
4-Methylphenol	ND	0.42	mg/Kg-dry	1	12/8/2004
2-Nitroaniline	ND	2	mg/Kg-dry	1	12/8/2004
3-Nitroaniline	ND	2	mg/Kg-dry	1	12/8/2004
4-Nitroaniline	ND	2	mg/Kg-dry	1	12/8/2004
Nitrobenzene	ND	0.22	mg/Kg-dry	1	12/8/2004
2-Nitrophenol	ND	0.42	mg/Kg-dry	1	12/8/2004
4-Nitrophenol	ND	2	mg/Kg-dry	1	12/8/2004
N-Nitrosodi-n-propylamine	ND	0.22	mg/Kg-dry	1	12/8/2004
N-Nitrosodiphenylamine	ND	0.42	mg/Kg-dry	1	12/8/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.42	mg/Kg-dry	1	12/8/2004
Pentachlorophenol	ND	2	mg/Kg-dry	1	12/8/2004
Phenol	ND	0.42	mg/Kg-dry	1	12/8/2004
1,2,4-Trichlorobenzene	ND	0.42	mg/Kg-dry	1	12/8/2004
2,4,5-Trichlorophenol	ND	0.84	mg/Kg-dry	1	12/8/2004
2,4,6-Trichlorophenol	ND	0.42	mg/Kg-dry	1	12/8/2004
Percent Moisture	D2974	1	Prep	Date: 12/3/2004	Analyst: RW
Percent Moisture	22.31	0.01	* wt%	1	12/4/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

K - Ki D outside accepted recovery illin

E - Value above quantitation range

H - Holding time exceeded

Page 15 of 30

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client:** Client Sample ID: WSS-SB54-002

Lab Order: 0412059 Tag Number: 14-16'

12/2/2004 10:55:00 AM **Project:** 32088, Willow Street Station-General Iron **Collection Date:**

Lab ID: 0412059-006A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50)35/8260E	B Prep	Date: 12/3/2004	Analyst: PS
Acetone	ND	0.027	mg/Kg-dry	1	12/8/2004
Benzene	ND	0.0054	mg/Kg-dry	1	12/8/2004
Bromodichloromethane	ND	0.0054	mg/Kg-dry	1	12/8/2004
Bromoform	ND	0.0054	mg/Kg-dry	1	12/8/2004
Bromomethane	ND	0.011	mg/Kg-dry	1	12/8/2004
2-Butanone	ND	0.011	mg/Kg-dry	1	12/8/2004
Carbon disulfide	ND	0.0054	mg/Kg-dry	1	12/8/2004
Carbon tetrachloride	ND	0.0054	mg/Kg-dry	1	12/8/2004
Chlorobenzene	ND	0.0054	mg/Kg-dry	1	12/8/2004
Chloroethane	ND	0.011	mg/Kg-dry	1	12/8/2004
Chloroform	ND	0.0054	mg/Kg-dry	1	12/8/2004
Chloromethane	ND	0.0054	mg/Kg-dry	1	12/8/2004
Dibromochloromethane	ND	0.0054	mg/Kg-dry	1	12/8/2004
1,1-Dichloroethane	ND	0.0054	mg/Kg-dry	1	12/8/2004
1,2-Dichloroethane	ND	0.0054	mg/Kg-dry	1	12/8/2004
1,1-Dichloroethene	ND	0.0054	mg/Kg-dry	1	12/8/2004
cis-1,2-Dichloroethene	ND	0.0054	mg/Kg-dry	1	12/8/2004
trans-1,2-Dichloroethene	ND	0.0054	mg/Kg-dry	1	12/8/2004
1,2-Dichloropropane	ND	0.0054	mg/Kg-dry	1	12/8/2004
cis-1,3-Dichloropropene	ND	0.0054	mg/Kg-dry	1	12/8/2004
trans-1,3-Dichloropropene	ND	0.0054	mg/Kg-dry	1	12/8/2004
Ethylbenzene	ND	0.0054	mg/Kg-dry	1	12/8/2004
2-Hexanone	ND	0.011	mg/Kg-dry	1	12/8/2004
4-Methyl-2-pentanone	ND	0.011	mg/Kg-dry	1	12/8/2004
Methylene chloride	ND	0.011	mg/Kg-dry	1	12/8/2004
Methyl tert-butyl ether	ND	0.0054	mg/Kg-dry	1	12/8/2004
Styrene	ND	0.0054	mg/Kg-dry	1	12/8/2004
1,1,2,2-Tetrachloroethane	ND	0.0054	mg/Kg-dry	1	12/8/2004
Tetrachloroethene	ND	0.0054	mg/Kg-dry	1	12/8/2004
Toluene	ND	0.0054	mg/Kg-dry	1	12/8/2004
1,1,1-Trichloroethane	ND	0.0054	mg/Kg-dry	1	12/8/2004
1,1,2-Trichloroethane	ND	0.0054	mg/Kg-dry	1	12/8/2004
Trichloroethene	ND	0.0054	mg/Kg-dry	1	12/8/2004
Vinyl chloride	ND	0.0054	mg/Kg-dry	1	12/8/2004
Xylenes, Total	ND	0.011	mg/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB54-002

Lab Order: 0412059 **Tag Number:** 14-16'

Project: 32088, Willow Street Station-General Iron Collection Date: 12/2/2004 10:55:00 AM

Lab ID: 0412059-006B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SW	/3580A)	Prep	Date: 12/7/2004	Analyst: JF
TPH (Gasoline)	ND	22	* 1	mg/Kg-dry	1	12/8/2004
TPH (Diesel)	ND	22	* 1	mg/Kg-dry	1	12/8/2004
TPH (Oil)	ND	22	* 1	mg/Kg-dry	1	12/8/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550E	B) Prep	Date: 12/7/2004	Analyst: VS
Acenaphthene	0.046	0.03	I	mg/Kg-dry	1	12/7/2004
Acenaphthylene	ND	0.03	I	mg/Kg-dry	1	12/7/2004
Anthracene	0.046	0.03	I	mg/Kg-dry	1	12/7/2004
Benz(a)anthracene	0.037	0.03		mg/Kg-dry	1	12/7/2004
Benzo(b)fluoranthene	ND	0.03	1	mg/Kg-dry	1	12/7/2004
Benzo(k)fluoranthene	ND	0.03	I	mg/Kg-dry	1	12/7/2004
Benzo(g,h,i)perylene	ND	0.03	I	mg/Kg-dry	1	12/7/2004
Benzo(a)pyrene	0.034	0.03	ı	mg/Kg-dry	1	12/7/2004
Chrysene	0.045	0.03	1	mg/Kg-dry	1	12/7/2004
Dibenz(a,h)anthracene	ND	0.03		mg/Kg-dry	1	12/7/2004
Fluoranthene	0.062	0.03		mg/Kg-dry	1	12/7/2004
Fluorene	0.049	0.03		mg/Kg-dry	1	12/7/2004
Indeno(1,2,3-cd)pyrene	ND	0.03	1	mg/Kg-dry	1	12/7/2004
Naphthalene	0.26	0.03		mg/Kg-dry	1	12/7/2004
Phenanthrene	0.15	0.03		mg/Kg-dry	1	12/7/2004
Pyrene	0.095	0.03		mg/Kg-dry	1	12/7/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	(3550B)	Prep	Date: 12/7/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.4	=	mg/Kg-dry	1	12/8/2004
Bis(2-chloroethyl)ether	ND	0.4	1	mg/Kg-dry	1	12/8/2004
Bis(2-ethylhexyl)phthalate	ND	0.4	I	mg/Kg-dry	1	12/8/2004
4-Bromophenyl phenyl ether	ND	0.4		mg/Kg-dry	1	12/8/2004
Butyl benzyl phthalate	ND	0.4		mg/Kg-dry	1	12/8/2004
Carbazole	ND	0.4		mg/Kg-dry	1	12/8/2004
4-Chloro-3-methylphenol	ND	0.4		mg/Kg-dry	1	12/8/2004
4-Chloroaniline	ND	0.4		mg/Kg-dry	1	12/8/2004
2-Chloronaphthalene	ND	0.4		mg/Kg-dry	1	12/8/2004
2-Chlorophenol	ND	0.4		mg/Kg-dry	1	12/8/2004
4-Chlorophenyl phenyl ether	ND	0.4		mg/Kg-dry	1	12/8/2004
Dibenzofuran	ND	0.4		mg/Kg-dry	1	12/8/2004
1,2-Dichlorobenzene	ND	0.4		mg/Kg-dry	1	12/8/2004
1,3-Dichlorobenzene	ND	0.4		mg/Kg-dry	1	12/8/2004
1,4-Dichlorobenzene	ND	0.4		mg/Kg-dry	1	12/8/2004
3,3´-Dichlorobenzidine	ND	0.79		mg/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB54-002

Lab Order: 0412059 **Tag Number:** 14-16'

Project: 32088, Willow Street Station-General Iron Collection Date: 12/2/2004 10:55:00 AM

Lab ID: 0412059-006B **Matrix:** Soil

Analyses	Result	RL Qu	alifier Units	DF I	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW827	70C (SW355	0B) Prep	Date: 12/7/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.4	mg/Kg-dry	1	12/8/2004
Diethyl phthalate	ND	0.4	mg/Kg-dry	1	12/8/2004
Dimethyl phthalate	ND	0.4	mg/Kg-dry	1	12/8/2004
Di-n-butyl phthalate	ND	0.4	mg/Kg-dry	1	12/8/2004
2,4-Dimethylphenol	ND	0.4	mg/Kg-dry	1	12/8/2004
4,6-Dinitro-2-methylphenol	ND	1.9	mg/Kg-dry	1	12/8/2004
2,4-Dinitrophenol	ND	1.9	mg/Kg-dry	1	12/8/2004
2,4-Dinitrotoluene	ND	0.2	mg/Kg-dry	1	12/8/2004
2,6-Dinitrotoluene	ND	0.2	mg/Kg-dry	1	12/8/2004
Di-n-octyl phthalate	ND	0.4	mg/Kg-dry	1	12/8/2004
Hexachlorobenzene	ND	0.4	mg/Kg-dry	1	12/8/2004
Hexachlorobutadiene	ND	0.4	mg/Kg-dry	1	12/8/2004
Hexachlorocyclopentadiene	ND	0.4	mg/Kg-dry	1	12/8/2004
Hexachloroethane	ND	0.4	mg/Kg-dry	1	12/8/2004
Isophorone	ND	0.4	mg/Kg-dry	1	12/8/2004
2-Methylnaphthalene	ND	0.4	mg/Kg-dry	1	12/8/2004
2-Methylphenol	ND	0.4	mg/Kg-dry	1	12/8/2004
4-Methylphenol	ND	0.4	mg/Kg-dry	1	12/8/2004
2-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/8/2004
3-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/8/2004
4-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/8/2004
Nitrobenzene	ND	0.2	mg/Kg-dry	1	12/8/2004
2-Nitrophenol	ND	0.4	mg/Kg-dry	1	12/8/2004
4-Nitrophenol	ND	1.9	mg/Kg-dry	1	12/8/2004
N-Nitrosodi-n-propylamine	ND	0.2	mg/Kg-dry	1	12/8/2004
N-Nitrosodiphenylamine	ND	0.4	mg/Kg-dry	1	12/8/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.4	mg/Kg-dry	1	12/8/2004
Pentachlorophenol	ND	1.9	mg/Kg-dry	1	12/8/2004
Phenol	ND	0.4	mg/Kg-dry	1	12/8/2004
1,2,4-Trichlorobenzene	ND	0.4	mg/Kg-dry	1	12/8/2004
2,4,5-Trichlorophenol	ND	0.79	mg/Kg-dry	1	12/8/2004
2,4,6-Trichlorophenol	ND	0.4	mg/Kg-dry	1	12/8/2004
Percent Moisture	D2974		Prep	Date: 12/3/2004	Analyst: RW
Percent Moisture	17.42	0.01	* wt%	1	12/4/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

K - Ki D outside accepted recovery iiii

E - Value above quantitation range H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB58-001

Lab Order: 0412059 **Tag Number:** 12-14'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/2/2004 12:40:00 PM

Lab ID: 0412059-007A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50)35/8260E	B Prep	Date: 12/3/2004	Analyst: PS
Acetone	ND	0.047	mg/Kg-dry	1	12/8/2004
Benzene	ND	0.0094	mg/Kg-dry	1	12/8/2004
Bromodichloromethane	ND	0.0094	mg/Kg-dry	1	12/8/2004
Bromoform	ND	0.0094	mg/Kg-dry	1	12/8/2004
Bromomethane	ND	0.019	mg/Kg-dry	1	12/8/2004
2-Butanone	ND	0.019	mg/Kg-dry	1	12/8/2004
Carbon disulfide	ND	0.0094	mg/Kg-dry	1	12/8/2004
Carbon tetrachloride	ND	0.0094	mg/Kg-dry	1	12/8/2004
Chlorobenzene	ND	0.0094	mg/Kg-dry	1	12/8/2004
Chloroethane	ND	0.019	mg/Kg-dry	1	12/8/2004
Chloroform	ND	0.0094	mg/Kg-dry	1	12/8/2004
Chloromethane	ND	0.0094	mg/Kg-dry	1	12/8/2004
Dibromochloromethane	ND	0.0094	mg/Kg-dry	1	12/8/2004
1,1-Dichloroethane	ND	0.0094	mg/Kg-dry	1	12/8/2004
1,2-Dichloroethane	ND	0.0094	mg/Kg-dry	1	12/8/2004
1,1-Dichloroethene	ND	0.0094	mg/Kg-dry	1	12/8/2004
cis-1,2-Dichloroethene	ND	0.0094	mg/Kg-dry	1	12/8/2004
trans-1,2-Dichloroethene	ND	0.0094	mg/Kg-dry	1	12/8/2004
1,2-Dichloropropane	ND	0.0094	mg/Kg-dry	1	12/8/2004
cis-1,3-Dichloropropene	ND	0.0094	mg/Kg-dry	1	12/8/2004
trans-1,3-Dichloropropene	ND	0.0094	mg/Kg-dry	1	12/8/2004
Ethylbenzene	ND	0.0094	mg/Kg-dry	1	12/8/2004
2-Hexanone	ND	0.019	mg/Kg-dry	1	12/8/2004
4-Methyl-2-pentanone	ND	0.019	mg/Kg-dry	1	12/8/2004
Methylene chloride	ND	0.019	mg/Kg-dry	1	12/8/2004
Methyl tert-butyl ether	ND	0.0094	mg/Kg-dry	1	12/8/2004
Styrene	ND	0.0094	mg/Kg-dry	1	12/8/2004
1,1,2,2-Tetrachloroethane	ND	0.0094	mg/Kg-dry	1	12/8/2004
Tetrachloroethene	ND	0.0094	mg/Kg-dry	1	12/8/2004
Toluene	ND	0.0094	mg/Kg-dry	1	12/8/2004
1,1,1-Trichloroethane	ND	0.0094	mg/Kg-dry	1	12/8/2004
1,1,2-Trichloroethane	ND	0.0094	mg/Kg-dry	1	12/8/2004
Trichloroethene	ND	0.0094	mg/Kg-dry	1	12/8/2004
Vinyl chloride	ND	0.0094	mg/Kg-dry	1	12/8/2004
Xylenes, Total	ND	0.019	mg/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded Page 19

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB58-001

Lab Order: 0412059 **Tag Number:** 12-14'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/2/2004 12:40:00 PM

Lab ID: 0412059-007B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF I	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SW	/3580A)	Prep	Date: 12/7/2004	Analyst: JF
TPH (Gasoline)	ND	31	*	mg/Kg-dry	1	12/8/2004
TPH (Diesel)	300	31	*	mg/Kg-dry	1	12/8/2004
TPH (Oil)	1100	31	*	mg/Kg-dry	1	12/8/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550E	B) Prep	Date: 12/7/2004	Analyst: VS
Acenaphthene	4.3	0.41		mg/Kg-dry	10	12/8/2004
Acenaphthylene	0.45	0.41		mg/Kg-dry	10	12/8/2004
Anthracene	11	4.1		mg/Kg-dry	100	12/8/2004
Benz(a)anthracene	14	4.1		mg/Kg-dry	100	12/8/2004
Benzo(b)fluoranthene	8.5	4.1		mg/Kg-dry	100	12/8/2004
Benzo(k)fluoranthene	9.8	4.1		mg/Kg-dry	100	12/8/2004
Benzo(g,h,i)perylene	3.2	0.41		mg/Kg-dry	10	12/8/2004
Benzo(a)pyrene	12	4.1		mg/Kg-dry	100	12/8/2004
Chrysene	12	4.1		mg/Kg-dry	100	12/8/2004
Dibenz(a,h)anthracene	1.6	0.41		mg/Kg-dry	10	12/8/2004
Fluoranthene	27	4.1		mg/Kg-dry	100	12/8/2004
Fluorene	6.2	4.1		mg/Kg-dry	100	12/8/2004
Indeno(1,2,3-cd)pyrene	3.8	0.41		mg/Kg-dry	10	12/8/2004
Naphthalene	4	0.41		mg/Kg-dry	10	12/8/2004
Phenanthrene	27	4.1		mg/Kg-dry	100	12/8/2004
Pyrene	23	4.1		mg/Kg-dry	100	12/8/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	(3550B)	Prep	Date: 12/7/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.54	·=	mg/Kg-dry	1	12/8/2004
Bis(2-chloroethyl)ether	ND	0.54		mg/Kg-dry	1	12/8/2004
Bis(2-ethylhexyl)phthalate	ND	0.54		mg/Kg-dry	1	12/8/2004
4-Bromophenyl phenyl ether	ND	0.54		mg/Kg-dry	1	12/8/2004
Butyl benzyl phthalate	ND	0.54		mg/Kg-dry	1	12/8/2004
Carbazole	6.8	0.54		mg/Kg-dry	1	12/8/2004
4-Chloro-3-methylphenol	ND	0.54		mg/Kg-dry	1	12/8/2004
4-Chloroaniline	ND	0.54		mg/Kg-dry	1	12/8/2004
2-Chloronaphthalene	ND	0.54		mg/Kg-dry	1	12/8/2004
2-Chlorophenol	ND	0.54		mg/Kg-dry	1	12/8/2004
4-Chlorophenyl phenyl ether	ND	0.54		mg/Kg-dry	1	12/8/2004
Dibenzofuran	4.6	0.54		mg/Kg-dry	1	12/8/2004
1,2-Dichlorobenzene	ND	0.54		mg/Kg-dry	1	12/8/2004
1,3-Dichlorobenzene	ND	0.54		mg/Kg-dry	1	12/8/2004
1,4-Dichlorobenzene	ND	0.54		mg/Kg-dry	1	12/8/2004
3,3'-Dichlorobenzidine	ND	1.1		mg/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

R - RI D outside accepted recovery init

E - Value above quantitation rangeH - Holding time exceeded

Page 20 of 30

2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB58-001

Lab Order: 0412059 **Tag Number:** 12-14'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/2/2004 12:40:00 PM

Lab ID: 0412059-007B **Matrix:** Soil

Analyses	Result	RL (Qualifier Units	DF I	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW3	550B) Prep	Date: 12/7/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.54	mg/Kg-dry	1	12/8/2004
Diethyl phthalate	ND	0.54	mg/Kg-dry	1	12/8/2004
Dimethyl phthalate	ND	0.54	mg/Kg-dry	1	12/8/2004
Di-n-butyl phthalate	ND	0.54	mg/Kg-dry	1	12/8/2004
2,4-Dimethylphenol	ND	0.54	mg/Kg-dry	1	12/8/2004
4,6-Dinitro-2-methylphenol	ND	2.6	mg/Kg-dry	1	12/8/2004
2,4-Dinitrophenol	ND	2.6	mg/Kg-dry	1	12/8/2004
2,4-Dinitrotoluene	ND	0.28	mg/Kg-dry	1	12/8/2004
2,6-Dinitrotoluene	ND	0.28	mg/Kg-dry	1	12/8/2004
Di-n-octyl phthalate	ND	0.54	mg/Kg-dry	1	12/8/2004
Hexachlorobenzene	ND	0.54	mg/Kg-dry	1	12/8/2004
Hexachlorobutadiene	ND	0.54	mg/Kg-dry	1	12/8/2004
Hexachlorocyclopentadiene	ND	0.54	mg/Kg-dry	1	12/8/2004
Hexachloroethane	ND	0.54	mg/Kg-dry	1	12/8/2004
Isophorone	ND	0.54	mg/Kg-dry	1	12/8/2004
2-Methylnaphthalene	3.8	0.54	mg/Kg-dry	1	12/8/2004
2-Methylphenol	ND	0.54	mg/Kg-dry	1	12/8/2004
4-Methylphenol	2.2	0.54	mg/Kg-dry	1	12/8/2004
2-Nitroaniline	ND	2.6	mg/Kg-dry	1	12/8/2004
3-Nitroaniline	ND	2.6	mg/Kg-dry	1	12/8/2004
4-Nitroaniline	ND	2.6	mg/Kg-dry	1	12/8/2004
Nitrobenzene	ND	0.28	mg/Kg-dry	1	12/8/2004
2-Nitrophenol	ND	0.54	mg/Kg-dry	1	12/8/2004
4-Nitrophenol	ND	2.6	mg/Kg-dry	1	12/8/2004
N-Nitrosodi-n-propylamine	ND	0.28	mg/Kg-dry	1	12/8/2004
N-Nitrosodiphenylamine	ND	0.54	mg/Kg-dry	1	12/8/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.54	mg/Kg-dry	1	12/8/2004
Pentachlorophenol	ND	2.6	mg/Kg-dry	1	12/8/2004
Phenol	ND	0.54	mg/Kg-dry	1	12/8/2004
1,2,4-Trichlorobenzene	ND	0.54	mg/Kg-dry	1	12/8/2004
2,4,5-Trichlorophenol	ND	1.1	mg/Kg-dry	1	12/8/2004
2,4,6-Trichlorophenol	ND	0.54	mg/Kg-dry	1	12/8/2004
Percent Moisture	D2974	1	Prep	Date: 12/3/2004	Analyst: RW
Percent Moisture	39.73	0.01	* wt%	1	12/4/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

K - Ki D outside accepted recovery min

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004
Print Date: December 15, 2004

Client:

Burns & McDonnell

Client Sample ID:

WSS-SB58-002

Lab Order:

0412059

Tag Number: 16-18'

Project:

32088, Willow Street Station- General Iron

Collection Date:

e: 12/2/2004 1:10:00 PM

Lab ID:

0412059-008A

Matrix: Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS		035/8260E	B Prep	Date: 12/3/2004	Analyst: PS
Acetone	NDUS	0.031	mg/Kg-dry	1	12/8/2004
Benzene	ND /	0.0061	mg/Kg-dry	1	12/8/2004
Bromodichloromethane	ND	0.0061	mg/Kg-dry	1	12/8/2004
Bromoform	ND	0.0061	mg/Kg-dry	1	12/8/2004
Bromomethane	ND	0.012	mg/Kg-dry	1	12/8/2004
2-Butanone	ND	0.012	mg/Kg-dry	1 .	12/8/2004
Carbon disulfide	ND	0.0061	mg/Kg-dry	1	12/8/2004
Carbon tetrachloride	ND	0.0061	mg/Kg-dry	1	12/8/2004
Chlorobenzene	ND	0.0061	mg/Kg-dry	1	12/8/2004
Chloroethane	ND	0.012	mg/Kg-dry	1.	12/8/2004
Chloroform	ND	0.0061	mg/Kg-dry	1	12/8/2004
Chloromethane	ND	0.0061	mg/Kg-dry	1	12/8/2004
Dibromochloromethane	ND	0.0061	mg/Kg-dry	1	12/8/2004
1,1-Dichloroethane	ND	0.0061	mg/Kg-dry	1	12/8/2004
1,2-Dichloroethane	ND	0.0061	mg/Kg-dry	1	12/8/2004
1,1-Dichloroethene	ND	0.0061	mg/Kg-dry	1 .	12/8/2004
cis-1,2-Dichloroethene	ND	0.0061	mg/Kg-dry	1	12/8/2004
trans-1,2-Dichloroethene	ND	0.0061	mg/Kg-dry	1	12/8/2004
1,2-Dichloropropane	ND	0.0061	mg/Kg-dry	1	12/8/2004
cis-1,3-Dichloropropene	ND	0.0061	mg/Kg-dry	1 -	12/8/2004
trans-1,3-Dichloropropene	ND	0.0061	mg/Kg-dry	1	12/8/2004
Ethylbenzene	ND	0.0061	mg/Kg-dry	1	12/8/2004
2-Hexanone	ND	0.012	mg/Kg-dry	1	12/8/2004
4-Methyl-2-pentanone	ND	0.012	mg/Kg-dry	1	12/8/2004
Methylene chloride	ND	0.012	mg/Kg-dry	1	12/8/2004
Methyl tert-butyl ether	ND	0.0061	mg/Kg-dry	1	12/8/2004
Styrene	ND	0.0061	mg/Kg-dry	1	12/8/2004
1,1,2,2-Tetrachloroethane	ŃD	0.0061	mg/Kg-dry	1	12/8/2004
Tetrachloroethene	ND	0.0061	mg/Kg-dry	1	12/8/2004
Toluene	ND	0.0061	mg/Kg-dry	1	12/8/2004
1,1,1-Trichloroethane	ND	0.0061	mg/Kg-dry	1	12/8/2004
1,1,2-Trichloroethane	ND	0.0061	mg/Kg-dry	1	12/8/2004
Trichloroethene	ND	0.0061	mg/Kg-dry	1	12/8/2004
Vinyl chloride	ND	0.0061	mg/Kg-dry	1	12/8/2004
Xylenes, Total	ND 🗸	0.012	mg/Kg-dry	1	12/8/2004

UJ=estimated non-detect value; poor surrogate recovery.

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded Page 22 of 30

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB58-002

Lab Order: 0412059 **Tag Number:** 16-18'

Project: 32088, Willow Street Station- General Iron **Collection Date:** 12/2/2004 1:10:00 PM

Lab ID: 0412059-008B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW8	015M (SW	/3580A)	Prep	Date: 12/7/200 4	Analyst: JF
TPH (Gasoline)	ND	23	*	mg/Kg-dry	1	12/9/2004
TPH (Diesel)	ND	23	*	mg/Kg-dry	1	12/9/2004
TPH (Oil)	25	23	*	mg/Kg-dry	1	12/9/2004
Polynuclear Aromatic Hydrocarbons	SW8	270C-SIM	(SW3550	B) Prep	Date: 12/7/2004	Analyst: VS
Acenaphthene	0.072	0.031		mg/Kg-dry	1	12/7/2004
Acenaphthylene	ND	0.031		mg/Kg-dry	1	12/7/2004
Anthracene	0.079	0.031		mg/Kg-dry	1	12/7/2004
Benz(a)anthracene	0.065	0.031		mg/Kg-dry	1	12/7/2004
Benzo(b)fluoranthene	0.038	0.031		mg/Kg-dry	1	12/7/2004
Benzo(k)fluoranthene	0.038	0.031		mg/Kg-dry	1	12/7/2004
Benzo(g,h,i)perylene	ND	0.031		mg/Kg-dry	1	12/7/2004
Benzo(a)pyrene	0.059	0.031		mg/Kg-dry	1	12/7/2004
Chrysene	0.061	0.031		mg/Kg-dry	1	12/7/2004
Dibenz(a,h)anthracene	ND	0.031		mg/Kg-dry	1	12/7/2004
Fluoranthene	0.14	0.031		mg/Kg-dry	1	12/7/2004
Fluorene	0.088	0.031		mg/Kg-dry	1	12/7/2004
Indeno(1,2,3-cd)pyrene	ND	0.031		mg/Kg-dry	1	12/7/2004
Naphthalene	0.39	0.031		mg/Kg-dry	1	12/7/2004
Phenanthrene	0.24	0.031		mg/Kg-dry	1	12/7/2004
Pyrene	0.11	0.031		mg/Kg-dry	1	12/7/2004
Semivolatile Organic Compounds by GC/MS	SW8	270C (SW	3550B)	Prep	Date: 12/7/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.41	•	mg/Kg-dry	1	12/8/2004
Bis(2-chloroethyl)ether	ND	0.41		mg/Kg-dry	1	12/8/2004
Bis(2-ethylhexyl)phthalate	ND	0.41		mg/Kg-dry	1	12/8/2004
4-Bromophenyl phenyl ether	ND	0.41		mg/Kg-dry	1	12/8/2004
Butyl benzyl phthalate	ND	0.41		mg/Kg-dry	1	12/8/2004
Carbazole	ND	0.41		mg/Kg-dry	1	12/8/2004
4-Chloro-3-methylphenol	ND	0.41		mg/Kg-dry	1	12/8/2004
4-Chloroaniline	ND	0.41		mg/Kg-dry	1	12/8/2004
2-Chloronaphthalene	ND	0.41		mg/Kg-dry	1	12/8/2004
2-Chlorophenol	ND	0.41		mg/Kg-dry	1	12/8/2004
4-Chlorophenyl phenyl ether	ND	0.41		mg/Kg-dry	1	12/8/2004
Dibenzofuran	ND	0.41		mg/Kg-dry	1	12/8/2004
1,2-Dichlorobenzene	ND	0.41		mg/Kg-dry	1	12/8/2004
1,3-Dichlorobenzene	ND	0.41		mg/Kg-dry	1	12/8/2004
1,4-Dichlorobenzene	ND	0.41		mg/Kg-dry	1	12/8/2004
3,3´-Dichlorobenzidine	ND	0.82		mg/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

K - KFD outside accepted recovery mint

E - Value above quantitation range H - Holding time exceeded Page 23 of 30

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB58-002

Lab Order: 0412059 **Tag Number:** 16-18'

Project: 32088, Willow Street Station- General Iron **Collection Date:** 12/2/2004 1:10:00 PM

Lab ID: 0412059-008B **Matrix:** Soil

Analyses	Result	RL (Qualifier Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW3	550B) Pre	o Date: 12/7/200	4 Analyst: PAB
2,4-Dichlorophenol	ND	0.41	mg/Kg-dry	1	12/8/2004
Diethyl phthalate	ND	0.41	mg/Kg-dry	1	12/8/2004
Dimethyl phthalate	ND	0.41	mg/Kg-dry	['] 1	12/8/2004
Di-n-butyl phthalate	ND	0.41	mg/Kg-dry	['] 1	12/8/2004
2,4-Dimethylphenol	ND	0.41	mg/Kg-dry	['] 1	12/8/2004
4,6-Dinitro-2-methylphenol	ND	2	mg/Kg-dry	['] 1	12/8/2004
2,4-Dinitrophenol	ND	2	mg/Kg-dry	['] 1	12/8/2004
2,4-Dinitrotoluene	ND	0.21	mg/Kg-dry	1	12/8/2004
2,6-Dinitrotoluene	ND	0.21	mg/Kg-dry	1	12/8/2004
Di-n-octyl phthalate	ND	0.41	mg/Kg-dry	1	12/8/2004
Hexachlorobenzene	ND	0.41	mg/Kg-dry	1	12/8/2004
Hexachlorobutadiene	ND	0.41	mg/Kg-dry	1	12/8/2004
Hexachlorocyclopentadiene	ND	0.41	mg/Kg-dry	1	12/8/2004
Hexachloroethane	ND	0.41	mg/Kg-dry	1	12/8/2004
Isophorone	ND	0.41	mg/Kg-dry	1	12/8/2004
2-Methylnaphthalene	ND	0.41	mg/Kg-dry	1	12/8/2004
2-Methylphenol	ND	0.41	mg/Kg-dry	1	12/8/2004
4-Methylphenol	ND	0.41	mg/Kg-dry	1	12/8/2004
2-Nitroaniline	ND	2	mg/Kg-dry	1	12/8/2004
3-Nitroaniline	ND	2	mg/Kg-dry	['] 1	12/8/2004
4-Nitroaniline	ND	2	mg/Kg-dry	['] 1	12/8/2004
Nitrobenzene	ND	0.21	mg/Kg-dry	['] 1	12/8/2004
2-Nitrophenol	ND	0.41	mg/Kg-dry	['] 1	12/8/2004
4-Nitrophenol	ND	2	mg/Kg-dry	['] 1	12/8/2004
N-Nitrosodi-n-propylamine	ND	0.21	mg/Kg-dry	['] 1	12/8/2004
N-Nitrosodiphenylamine	ND	0.41	mg/Kg-dry	['] 1	12/8/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.41	mg/Kg-dry	1	12/8/2004
Pentachlorophenol	ND	2	mg/Kg-dry	1	12/8/2004
Phenol	ND	0.41	mg/Kg-dry	1	12/8/2004
1,2,4-Trichlorobenzene	ND	0.41	mg/Kg-dry	1	12/8/2004
2,4,5-Trichlorophenol	ND	0.82	mg/Kg-dry	['] 1	12/8/2004
2,4,6-Trichlorophenol	ND	0.41	mg/Kg-dry	1	12/8/2004
Percent Moisture	D2974	1	Pre	Date: 12/3/200	4 Analyst: RW
Percent Moisture	20.26	0.01	* wt%	1	12/4/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded Page 24 of 30

2201 West Campbell Park Drive Chicago, IL 60612-3547 Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

> Report Date: December 10, 2004 Print Date: December 15, 2004

Client:

Burns & McDonnell

Client Sample ID: WSS-SB58-003

Lab Order:

0412059

Project:

Tag Number: 8-10'

Collection Date: 12/2/2004 12:45:00 PM

Lab ID:

32088, Willow Street Station-General Iron 0412059-009A

Matrix: Soil

Analyses	Result	RL	Qualifier Units	DF I	Date Analyzed
Volatile Organic Compounds by GC/MS		35/8260E	Prep	Date: 12/3/2004	Analyst: PS
Acetone	0.047 1	0.046	mg/Kg-dry	1	12/8/2004
Benzene	ND UJ	0.0093	mg/Kg-dry	1	12/8/2004
Bromodichloromethane	ND	0.0093	mg/Kg-dry	1	12/8/2004
Bromoform	ND	0.0093	mg/Kg-dry	1	12/8/2004
Bromomethane	ND \	0.019	mg/Kg-dry	1	12/8/2004
2-Butanone	ND	0.019	mg/Kg-dry	1	12/8/2004
Carbon disulfide	ND	00093	mg/Kg-dry	1	12/8/2004
Carbon tetrachloride	ND	00093	mg/Kg-dry	1	12/8/2004
Chlorobenzene	ND -	0.0093	mg/Kg-dry	1	12/8/2004
Chloroethane	ND	0.019	mg/Kg-dry	1	12/8/2004
Chloroform	ND	0.0093	mg/Kg-dry	1	12/8/2004
Chloromethane	. ND	0.0093	mg/Kg-dry	1	12/8/2004
Dibromochloromethane	ND	0.0093	mg/Kg-dry	1	12/8/2004
1,1-Dichloroethane	ND	0.0093	mg/Kg-dry	1	12/8/2004
1,2-Dichloroethane	ND	0.0093	mg/Kg-dry	1	12/8/2004
1,1-Dichloroethene	ND	0.0093	mg/Kg-dry	1	12/8/2004
cis-1,2-Dichloroethene	ND	00093	mg/Kg-dry	1	12/8/2004
trans-1,2-Dichloroethene	ND	0.0093	mg/Kg-dry	1	12/8/2004
1,2-Dichloropropane	ND	0.0093	mg/Kg-dry	1	12/8/2004
cis-1,3-Dichloropropene	ND	0.0093	mg/Kg-dry	1	12/8/2004
trans-1,3-Dichloropropene	ND	0.0093	mg/Kg-dry	1	12/8/2004
Ethylbenzene	ND	00093	mg/Kg-dry	1	12/8/2004
2-Hexanone	ND	0.019	mg/Kg-dry	1	12/8/2004
4-Methyl-2-pentanone	ND	0.019	mg/Kg-dry	1	12/8/2004
Methylene chloride	ND	0.019	mg/Kg-dry	1	12/8/2004
Methyl tert-butyl ether	ND	0.0093	mg/Kg-dry	1	12/8/2004
Styrene	ND	0.0093	mg/Kg-dry	1	12/8/2004
1,1,2,2-Tetrachloroethane	ND	0.0093	mg/Kg-dry	1	12/8/2004
Tetrachloroethene	ND	0.0093	mg/Kg-dry	1	12/8/2004
Toluene	ND	0.0093	mg/Kg-dry	1	12/8/2004
1,1,1-Trichloroethane	ND	0.0093	mg/Kg-dry	1	12/8/2004
1,1,2-Trichloroethane	МD	0.0093	mg/Kg-dry	1	12/8/2004
Trichloroethene	ND	0.0093	mg/Kg-dry	1	12/8/2004
Vinyl chloride	ND	0.0093	mg/Kg-dry	1	12/8/2004
	ND 🌽	0.019	mg/Kg-dry	1	12/8/2004
J=estimated value	- POOR	SUL	rogate re	covery.	SFA
J=estimated value UJ=estimated value	-detec	t-Va	like; poor	surroy.	atere

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 25 of 30

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB58-003

Lab Order: 0412059 **Tag Number:** 8-10'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/2/2004 12:45:00 PM

Lab ID: 0412059-009B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SW	/3580A)	Prep	Date: 12/7/2004	Analyst: JF
TPH (Gasoline)	43	31	*	mg/Kg-dry	1	12/9/2004
TPH (Diesel)	5100	31		mg/Kg-dry	1	12/9/2004
TPH (Oil)	500	31	*	mg/Kg-dry	1	12/9/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550I	3) Prep	Date: 12/7/2004	Analyst: VS
Acenaphthene	1.3	0.39		mg/Kg-dry	10	12/8/2004
Acenaphthylene	0.63	0.39		mg/Kg-dry	10	12/8/2004
Anthracene	1.1	0.39		mg/Kg-dry	10	12/8/2004
Benz(a)anthracene	2.2	0.39		mg/Kg-dry	10	12/8/2004
Benzo(b)fluoranthene	2.3	0.39		mg/Kg-dry	10	12/8/2004
Benzo(k)fluoranthene	1.7	0.39		mg/Kg-dry	10	12/8/2004
Benzo(g,h,i)perylene	1.2	0.39		mg/Kg-dry	10	12/8/2004
Benzo(a)pyrene	2.4	0.39		mg/Kg-dry	10	12/8/2004
Chrysene	2	0.39		mg/Kg-dry	10	12/8/2004
Dibenz(a,h)anthracene	0.45	0.39		mg/Kg-dry	10	12/8/2004
Fluoranthene	4.2	0.39		mg/Kg-dry	10	12/8/2004
Fluorene	1.4	0.39		mg/Kg-dry	10	12/8/2004
Indeno(1,2,3-cd)pyrene	1.2	0.39		mg/Kg-dry	10	12/8/2004
Naphthalene	0.87	0.39		mg/Kg-dry	10	12/8/2004
Phenanthrene	1.3	0.39		mg/Kg-dry	10	12/8/2004
Pyrene	4.7	0.39		mg/Kg-dry	10	12/8/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	3550B)	Prep	Date: 12/7/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.51		mg/Kg-dry	1	12/8/2004
Bis(2-chloroethyl)ether	ND	0.51		mg/Kg-dry	1	12/8/2004
Bis(2-ethylhexyl)phthalate	ND	0.51		mg/Kg-dry	1	12/8/2004
4-Bromophenyl phenyl ether	ND	0.51		mg/Kg-dry	1	12/8/2004
Butyl benzyl phthalate	ND	0.51		mg/Kg-dry	1	12/8/2004
Carbazole	ND	0.51		mg/Kg-dry	1	12/8/2004
4-Chloro-3-methylphenol	ND	0.51		mg/Kg-dry	1	12/8/2004
4-Chloroaniline	ND	0.51		mg/Kg-dry	1	12/8/2004
2-Chloronaphthalene	ND	0.51		mg/Kg-dry	1	12/8/2004
2-Chlorophenol	ND	0.51		mg/Kg-dry	1	12/8/2004
4-Chlorophenyl phenyl ether	ND	0.51		mg/Kg-dry	1	12/8/2004
Dibenzofuran	ND	0.51		mg/Kg-dry	1	12/8/2004
1,2-Dichlorobenzene	ND	0.51		mg/Kg-dry	1	12/8/2004
1,3-Dichlorobenzene	ND	0.51		mg/Kg-dry	1	12/8/2004
1,4-Dichlorobenzene	ND	0.51		mg/Kg-dry	1	12/8/2004
3,3´-Dichlorobenzidine	ND	1		mg/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

K - Ki D outside accepted recovery mints

E - Value above quantitation range H - Holding time exceeded

Page 26 of 30

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB58-003

Lab Order: 0412059 **Tag Number:** 8-10'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/2/2004 12:45:00 PM

Lab ID: 0412059-009B **Matrix:** Soil

Analyses	Result	RL Q	Qualifier Units	DF I	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW35	550B) Prep	Date: 12/7/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.51	mg/Kg-dry	1	12/8/2004
Diethyl phthalate	ND	0.51	mg/Kg-dry	1	12/8/2004
Dimethyl phthalate	ND	0.51	mg/Kg-dry	1	12/8/2004
Di-n-butyl phthalate	ND	0.51	mg/Kg-dry	1	12/8/2004
2,4-Dimethylphenol	ND	0.51	mg/Kg-dry	1	12/8/2004
4,6-Dinitro-2-methylphenol	ND	2.5	mg/Kg-dry	1	12/8/2004
2,4-Dinitrophenol	ND	2.5	mg/Kg-dry	1	12/8/2004
2,4-Dinitrotoluene	ND	0.26	mg/Kg-dry	1	12/8/2004
2,6-Dinitrotoluene	ND	0.26	mg/Kg-dry	1	12/8/2004
Di-n-octyl phthalate	ND	0.51	mg/Kg-dry	1	12/8/2004
Hexachlorobenzene	ND	0.51	mg/Kg-dry	1	12/8/2004
Hexachlorobutadiene	ND	0.51	mg/Kg-dry	1	12/8/2004
Hexachlorocyclopentadiene	ND	0.51	mg/Kg-dry	1	12/8/2004
Hexachloroethane	ND	0.51	mg/Kg-dry	1	12/8/2004
Isophorone	ND	0.51	mg/Kg-dry	1	12/8/2004
2-Methylnaphthalene	1.3	0.51	mg/Kg-dry	1	12/8/2004
2-Methylphenol	ND	0.51	mg/Kg-dry	1	12/8/2004
4-Methylphenol	ND	0.51	mg/Kg-dry	1	12/8/2004
2-Nitroaniline	ND	2.5	mg/Kg-dry	1	12/8/2004
3-Nitroaniline	ND	2.5	mg/Kg-dry	1	12/8/2004
4-Nitroaniline	ND	2.5	mg/Kg-dry	1	12/8/2004
Nitrobenzene	ND	0.26	mg/Kg-dry	1	12/8/2004
2-Nitrophenol	ND	0.51	mg/Kg-dry	1	12/8/2004
4-Nitrophenol	ND	2.5	mg/Kg-dry	1	12/8/2004
N-Nitrosodi-n-propylamine	ND	0.26	mg/Kg-dry	1	12/8/2004
N-Nitrosodiphenylamine	ND	0.51	mg/Kg-dry	1	12/8/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.51	mg/Kg-dry	1	12/8/2004
Pentachlorophenol	ND	2.5	mg/Kg-dry	1	12/8/2004
Phenol	ND	0.51	mg/Kg-dry	1	12/8/2004
1,2,4-Trichlorobenzene	ND	0.51	mg/Kg-dry	1	12/8/2004
2,4,5-Trichlorophenol	ND	1	mg/Kg-dry	1	12/8/2004
2,4,6-Trichlorophenol	ND	0.51	mg/Kg-dry	1	12/8/2004
Percent Moisture	D2974	1	Prep	Date: 12/3/2004	Analyst: RW
Percent Moisture	36.81	0.01	* wt%	1	12/4/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

K - Ki D outside accepted recovery in

E - Value above quantitation rangeH - Holding time exceeded

Page 27 of 30

2201 West Campbell Park Drive Chicago, IL 60612-3547 Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client:** Client Sample ID: WSS-SB49B-001

Lab Order: 0412059 Tag Number: 14-16'

12/2/2004 2:10:00 PM **Project:** 32088, Willow Street Station-General Iron **Collection Date:**

Lab ID: 0412059-010A **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50)35/8260E	B Prep	Date: 12/3/2004	Analyst: PS
Acetone	ND	0.031	mg/Kg-dry	1	12/8/2004
Benzene	ND	0.0063	mg/Kg-dry	1	12/8/2004
Bromodichloromethane	ND	0.0063	mg/Kg-dry	1	12/8/2004
Bromoform	ND	0.0063	mg/Kg-dry	1	12/8/2004
Bromomethane	ND	0.013	mg/Kg-dry	1	12/8/2004
2-Butanone	ND	0.013	mg/Kg-dry	1	12/8/2004
Carbon disulfide	ND	0.0063	mg/Kg-dry	1	12/8/2004
Carbon tetrachloride	ND	0.0063	mg/Kg-dry	1	12/8/2004
Chlorobenzene	ND	0.0063	mg/Kg-dry	1	12/8/2004
Chloroethane	ND	0.013	mg/Kg-dry	1	12/8/2004
Chloroform	ND	0.0063	mg/Kg-dry	1	12/8/2004
Chloromethane	ND	0.0063	mg/Kg-dry	1	12/8/2004
Dibromochloromethane	ND	0.0063	mg/Kg-dry	1	12/8/2004
1,1-Dichloroethane	ND	0.0063	mg/Kg-dry	1	12/8/2004
1,2-Dichloroethane	ND	0.0063	mg/Kg-dry	1	12/8/2004
1,1-Dichloroethene	ND	0.0063	mg/Kg-dry	1	12/8/2004
cis-1,2-Dichloroethene	ND	0.0063	mg/Kg-dry	1	12/8/2004
trans-1,2-Dichloroethene	ND	0.0063	mg/Kg-dry	1	12/8/2004
1,2-Dichloropropane	ND	0.0063	mg/Kg-dry	1	12/8/2004
cis-1,3-Dichloropropene	ND	0.0063	mg/Kg-dry	1	12/8/2004
trans-1,3-Dichloropropene	ND	0.0063	mg/Kg-dry	1	12/8/2004
Ethylbenzene	ND	0.0063	mg/Kg-dry	1	12/8/2004
2-Hexanone	ND	0.013	mg/Kg-dry	1	12/8/2004
4-Methyl-2-pentanone	ND	0.013	mg/Kg-dry	1	12/8/2004
Methylene chloride	ND	0.013	mg/Kg-dry	1	12/8/2004
Methyl tert-butyl ether	ND	0.0063	mg/Kg-dry	1	12/8/2004
Styrene	ND	0.0063	mg/Kg-dry	1	12/8/2004
1,1,2,2-Tetrachloroethane	ND	0.0063	mg/Kg-dry	1	12/8/2004
Tetrachloroethene	ND	0.0063	mg/Kg-dry	1	12/8/2004
Toluene	ND	0.0063	mg/Kg-dry	1	12/8/2004
1,1,1-Trichloroethane	ND	0.0063	mg/Kg-dry	1	12/8/2004
1,1,2-Trichloroethane	ND	0.0063	mg/Kg-dry	1	12/8/2004
Trichloroethene	ND	0.0063	mg/Kg-dry	1	12/8/2004
Vinyl chloride	ND	0.0063	mg/Kg-dry	1	12/8/2004
Xylenes, Total	ND	0.013	mg/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Page 28 of 30 H - Holding time exceeded

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB49B-001

Lab Order: 0412059 **Tag Number:** 14-16'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/2/2004 2:10:00 PM

Lab ID: 0412059-010B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW80)15M (SV	/3580A)	Prep	Date: 12/7/	2004 Analyst: JF
TPH (Gasoline)	ND	22	-	mg/Kg-dry	1	12/9/2004
TPH (Diesel)	ND	22	* 1	mg/Kg-dry	1	12/9/2004
TPH (Oil)	ND	22	* 1	mg/Kg-dry	1	12/9/2004
Polynuclear Aromatic Hydrocarbons	SW82	270C-SIM	(SW3550E	B) Prep	Date: 12/7/ 2	2004 Analyst: VS
Acenaphthene	ND	0.031		mg/Kg-dry	1	12/7/2004
Acenaphthylene	ND	0.031	1	mg/Kg-dry	1	12/7/2004
Anthracene	ND	0.031	1	mg/Kg-dry	1	12/7/2004
Benz(a)anthracene	0.035	0.031	I	mg/Kg-dry	1	12/7/2004
Benzo(b)fluoranthene	ND	0.031	I	mg/Kg-dry	1	12/7/2004
Benzo(k)fluoranthene	0.032	0.031	I	mg/Kg-dry	1	12/7/2004
Benzo(g,h,i)perylene	ND	0.031	I	mg/Kg-dry	1	12/7/2004
Benzo(a)pyrene	0.041	0.031	I	mg/Kg-dry	1	12/7/2004
Chrysene	0.053	0.031	I	mg/Kg-dry	1	12/7/2004
Dibenz(a,h)anthracene	ND	0.031	i	mg/Kg-dry	1	12/7/2004
Fluoranthene	0.058	0.031	i	mg/Kg-dry	1	12/7/2004
Fluorene	ND	0.031	i	mg/Kg-dry	1	12/7/2004
Indeno(1,2,3-cd)pyrene	ND	0.031	i	mg/Kg-dry	1	12/7/2004
Naphthalene	0.041	0.031	i	mg/Kg-dry	1	12/7/2004
Phenanthrene	0.079	0.031		mg/Kg-dry	1	12/7/2004
Pyrene	0.078	0.031	i	mg/Kg-dry	1	12/7/2004
Semivolatile Organic Compounds by GC/MS	SW82	270C (SW	/3550B)	Prep	Date: 12/7/ 2	2004 Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.41	_	mg/Kg-dry	1	12/8/2004
Bis(2-chloroethyl)ether	ND	0.41		mg/Kg-dry	1	12/8/2004
Bis(2-ethylhexyl)phthalate	ND	0.41		mg/Kg-dry	1	12/8/2004
4-Bromophenyl phenyl ether	ND	0.41		mg/Kg-dry	1	12/8/2004
Butyl benzyl phthalate	ND	0.41		mg/Kg-dry	1	12/8/2004
Carbazole	ND	0.41		mg/Kg-dry	1	12/8/2004
4-Chloro-3-methylphenol	ND	0.41		mg/Kg-dry	1	12/8/2004
4-Chloroaniline	ND	0.41		mg/Kg-dry	1	12/8/2004
2-Chloronaphthalene	ND	0.41		mg/Kg-dry	1	12/8/2004
2-Chlorophenol	ND	0.41		mg/Kg-dry	1	12/8/2004
4-Chlorophenyl phenyl ether	ND	0.41		mg/Kg-dry	1	12/8/2004
Dibenzofuran	ND	0.41		mg/Kg-dry	1	12/8/2004
1,2-Dichlorobenzene	ND	0.41		mg/Kg-dry	1	12/8/2004
1,3-Dichlorobenzene	ND	0.41		mg/Kg-dry	1	12/8/2004
1,4-Dichlorobenzene	ND	0.41		mg/Kg-dry	1	12/8/2004
3,3'-Dichlorobenzidine	ND	0.82		mg/Kg-dry	1	12/8/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded Page 29 of 30

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB49B-001

Lab Order: 0412059 **Tag Number:** 14-16'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/2/2004 2:10:00 PM

Lab ID: 0412059-010B **Matrix:** Soil

Analyses	Result	RL	Qualifier Units	DF 1	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW:	3550B) Prep	Date: 12/7/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.41	mg/Kg-dry	1	12/8/2004
Diethyl phthalate	ND	0.41	mg/Kg-dry	1	12/8/2004
Dimethyl phthalate	ND	0.41	mg/Kg-dry	1	12/8/2004
Di-n-butyl phthalate	ND	0.41	mg/Kg-dry	1	12/8/2004
2,4-Dimethylphenol	ND	0.41	mg/Kg-dry	1	12/8/2004
4,6-Dinitro-2-methylphenol	ND	2	mg/Kg-dry	1	12/8/2004
2,4-Dinitrophenol	ND	2	mg/Kg-dry	1	12/8/2004
2,4-Dinitrotoluene	ND	0.21	mg/Kg-dry	1	12/8/2004
2,6-Dinitrotoluene	ND	0.21	mg/Kg-dry	1	12/8/2004
Di-n-octyl phthalate	ND	0.41	mg/Kg-dry	1	12/8/2004
Hexachlorobenzene	ND	0.41	mg/Kg-dry	1	12/8/2004
Hexachlorobutadiene	ND	0.41	mg/Kg-dry	1	12/8/2004
Hexachlorocyclopentadiene	ND	0.41	mg/Kg-dry	1	12/8/2004
Hexachloroethane	ND	0.41	mg/Kg-dry	1	12/8/2004
Isophorone	ND	0.41	mg/Kg-dry	1	12/8/2004
2-Methylnaphthalene	ND	0.41	mg/Kg-dry	1	12/8/2004
2-Methylphenol	ND	0.41	mg/Kg-dry	1	12/8/2004
4-Methylphenol	ND	0.41	mg/Kg-dry	1	12/8/2004
2-Nitroaniline	ND	2	mg/Kg-dry	1	12/8/2004
3-Nitroaniline	ND	2	mg/Kg-dry	1	12/8/2004
4-Nitroaniline	ND	2	mg/Kg-dry	1	12/8/2004
Nitrobenzene	ND	0.21	mg/Kg-dry	1	12/8/2004
2-Nitrophenol	ND	0.41	mg/Kg-dry	1	12/8/2004
4-Nitrophenol	ND	2	mg/Kg-dry	1	12/8/2004
N-Nitrosodi-n-propylamine	ND	0.21	mg/Kg-dry	1	12/8/2004
N-Nitrosodiphenylamine	ND	0.41	mg/Kg-dry	1	12/8/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.41	mg/Kg-dry	1	12/8/2004
Pentachlorophenol	ND	2	mg/Kg-dry	1	12/8/2004
Phenol	ND	0.41	mg/Kg-dry	1	12/8/2004
1,2,4-Trichlorobenzene	ND	0.41	mg/Kg-dry	1	12/8/2004
2,4,5-Trichlorophenol	ND	0.82	mg/Kg-dry	1	12/8/2004
2,4,6-Trichlorophenol	ND	0.41	mg/Kg-dry	1	12/8/2004
Percent Moisture	D2974	4	Prep	Date: 12/3/2004	Analyst: RW
Percent Moisture	21.43	0.01	* wt%	1	12/4/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

R - RI D outside accepted recovery mini

E - Value above quantitation rangeH - Holding time exceeded

Page 30 of 30

Burns & McDonnell Sike 1888		Ä	Request for Chemical Analysis and Chain of Custody Record	. Chemic	sal Anal	ysis and	Chain o	of Custod	y Rec	ord (44)	PCH 12	12-2-04 2 Of	
Burns & McDonnell Engineering		Laboratory:	ر) الم:	TAT					Doc	Document Control No: MSS-	Vo: WSS-	- 004 -2	\$5
2601 W. 22nd St Oak Brook, Illinois 60523		Address:		2201 West	Ales+	Campbell		Park	<u> </u>	Lab. neierence ivo. or Lpisoue	A C	7	
Phone: (630) 990-0300 Fax: (630) 990-0301	30) 990-0301	City/State/Zip:	ļ	Chicago, 11	-	60612				**************************************	0)		
Attention: Digne Saffic	0	Telephone:	\mathcal{L}	312)5	563-	1750-		:		Poul	(S)		
Project Number: 32088							0,	Sample Type	 		100		
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Sample Number		Ĕ	Sample Event	Sample Depth (in feet)	Depth	Sample Collected	ole ted	biul	muM	77.00	\ \\		
Group or Sample SWMU Name Point	Sample Designator	Round	Year	From	2	Date	Time	0S	69	77/X	,	Remarks	arks
WSS 3652	8		2004	و	∞	12kp4 0805	202	×	4	× ×		PID= 68.2 ppm	
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WSS SB54	28		2004	4	9	12/244 1055	055	X	4	× × ×		PID=0.0pm	- 16
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	2005	-	2002	9	9	12/204 1310	310	X	12	×, ×,		PID=0.0pm	Ā
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	San	Sampler (signature):	re):		3 3	Custody Seal Number WSF-004-2001 **********************************			MS/MSD Sow	MSITUCTIONS: WED SOMPTON TONION (•	7 pm/ers	
	\ /	Date/Time	Received By (signature):	3y (signature)		5 (Date/Time	υ γ	esent ii	Ice Present in Container:	Temperat	Temperature Upon Receipt:	
1. Unity Mark Bull 100 Bull 10	2	4	Received By (signature)	3y (signature)			LS:35		atory C	Laboratory Comments:)		
				i								061301	061301 Form WCD-KC1-CHI

Sample Receipt Checklist

Client Name B&M			Date and Tim	e Received:	12/2/2004
Work Order Numbe 0412059			Received by:	CDF	
Checklist completed by:	Date	2/2/04	Reviewed by:	Initials	1004 Date
Matrix:	Carrier name	Client Delivered			
Shipping container/cooler in good condition?		Yes 🗸	No 🗌	Not Present	
Custody seals intact on shippping container/coole	r?	Yes 🔽	No 🗔	Not Present	
Custody seals intact on sample bottles?		Yes	No 🗌	Not Present	
Chain of custody present?		Yes 🗹	No 🗆		
Chain of custody signed when relinquished and re	eceived?	Yes 🗸	No 🗌		
Chain of custody agrees with sample labels?		Yes 🗹	No 🗌		
Samples in proper container/bottle?		Yes 🗹	No 🗌		
Sample containers intact?		Yes 🗸	No 🗌		
Sufficient sample volume for indicated test?		Yes 🗸	No 🗌		
All samples received within holding time?		Yes 🗸	No 🗌		
Container or Temp Blank temperature in complia	nce?	Yes 🗹	No 🗌	Temperature	5 °C
Water - VOA vials have zero headspace?	No VOA vials sub	mitted	Yes 🗹	No 🗀	
Water - Samples properly preserved/ pH checked	?t	Yes	No 💹		
	Adjusted?	Che	cked by		
Any No and/or NA (not applicable) response mus	st be detailed in the	comments section	below.		
Client contacted	Date contacted:		Pers	on contacted	
Contacted by:	Regarding:				
Comments:					
Corrective Action					

Date: 15-Dec-04

CLIENT: Burns & McDonnell

Work Order: 0412059

Project: 32088, Willow Street Station- General Iron

Test No: SW5035/8260B Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Sample ID	BR4FBZ	BZMED8	DBFM	DCA12D4		
VBLK120804-2	108	96.6	97.7	102		
VLCS120804-2	100	101	100	94.5		
0412059-001A:50	94.1	100	98.5	102		
0412059-005A:100	97.9	98.2	95.8	91.8		
0412059-002A	76.3	83.2 *	96.8	104		
0412059-003A	86.5	95.9	101	106		
0412059-004A	84.4	86.7	102	108		
0412059-006A	86.2	88.0	99.7	93.3		
0412059-007A	85.6	95.9	94.1	96.8		
0412059-007AMS	89.9	98.1	102	101		
0412059-007AMSD	88.2	93.4	100	99.1		
0412059-008A	77.7	83.6 *	105	110		
0412059-008AMS	83.6	91.4	101	100		
0412059-008AMSD	78.2	88.1	102	106		
0412059-010A	80.7	85.3	105	104		
0412059-009A	59.2 *	88.9	111	101		
VBLK120804a-2	104	96.7	100	100		
VLCS120804A-2	100	99.2	104	104		
VLCSD120804A-2	102	97.7	106	109		
0412059-002AR	79.6	80.6 *	103	111		
0412059-007AMS	88.3	95.8	104	102		
0412059-007AMSD	85.1	97.5	104	107		
0412059-008AR	80.7	84.8 *	101	99.9		
0412059-008AMS	83.3	90.9	105	102		
0412059-008AMSD	85.9	87.6	99.8	105		
0412059-009AR	52.6 *	86.5	101	84.0 *		
0412059-010AR	74.9	83.2 *	104	104		

Acronym	Surrogate	QC Limits
BR4FBZ	= 4-Bromofluorobenzene	63-110
BZMED8	= Toluene-d8	85-110
DBFM	= Dibromofluoromethane	83-119
DCA12D4	= 1,2-Dichloroethane-d4	84-129

^{*} Surrogate recovery outside acceptance limits

CLIENT: Burns & McDonnell

Work Order: 0412059

Project: 32088, Willow Street Station- General Iron

Test No: SW8270C Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Date: 15-Dec-04

Sample ID	CLPH2D4	DCBZ12D4	NO2BZD5	PH246BR	PH2F	PHD5	PHEN2F	PHEND14
MB-12127-SVOC	79.9	71.7	89.6	108	84.3	91.6	74.4	87.1
LCS-12127-SVOC	74.5	66.8	87.4	86.2	77.6	88.4	73.5	88.9
0412059-001B	72.7	67.0	86.7	99.0	67.4	83.0	89.8	75.4
0412059-005B	80.6	88.4	95.7	111	72.5	91.4	174 *	98.0
0412059-009B	84.1	78.8	81.9	157 *	72.3	90.9	56.1	195 *
0412059-007B	66.5	58.9	78.7	127 *	59.1	77.8	76.7	95.3
0412059-007BMS	66.9	61.3	81.9	129 *	59.8	77.0	80.7	95.7
0412059-007BMSD	67.1	62.4	80.1	109	62.0	74.6	76.6	86.3
0412059-008B	89.0	83.0	102	88.5	84.5	99.7	91.9	76.8
0412059-008BMS	72.0	68.7	87.5	82.6	69.9	81.7	78.4	75.3
0412059-008BMSD	90.8	87.7	110	105	91.0	102	93.2	85.7
0412059-002B	92.5	86.5	110	94.9	91.7	107	96.2	96.9
0412059-010B	71.4	64.7	83.3	82.3	70.8	85.4	70.7	95.7
0412059-004B	82.3	76.2	100	64.1	82.3	99.5	81.8	99.5
0412059-003B	71.9	64.6	85.1	74.3	73.6	84.8	70.4	78.5
0412059-006B	79.3	71.2	93.5	73.8	80.5	93.7	74.4	81.4

Acronym		Surrogate	QC Limits
CLPH2D4	=	2-Chlorophenol-d4	20-130
DCBZ12D4	=	1,2-Dichlorobenzene-d4	20-130
NO2BZD5	=	Nitrobenzene-d5	23-120
PH246BR	=	2,4,6-Tribromophenol	19-122
PH2F	=	2-Fluorophenol	25-121
PHD5	=	Phenol-d5	24-113
PHEN2F	=	2-Fluorobiphenyl	30-115
PHEND14	=	4-Terphenyl-d14	18-137

^{*} Surrogate recovery outside acceptance limits

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 12/7/2004 12:30:55

Prep End Date:

Prep Factor Units:

Prep Batch 12127 Prep Code: 3550_SVOC Technician: JT mL/Kg

Sample ID	Matrix	pH SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0412059-001B	Soil	0.03032	0	0	1	32.982	12/7/2004	12/7/2004
0412059-002B	Soil	0.030035	0	0	1	33.294	12/7/2004	12/7/2004
0412059-003B	Soil	0.030067	0	0	1	33.259	12/7/2004	12/7/2004
0412059-004B	Soil	0.03038	0	0	1	32.916	12/7/2004	12/7/2004
0412059-005B	Soil	0.03026	0	0	1	33.047	12/7/2004	12/7/2004
0412059-006B	Soil	0.03025	0	0	1	33.058	12/7/2004	12/7/2004
0412059-007B	Soil	0.03031	0	0	1	32.992	12/7/2004	12/7/2004
0412059-007BMS	Soil	0.03029	0	0	1	33.014	12/7/2004	12/7/2004
0412059-007BMSD	Soil	0.03028	0	0	1	33.025	12/7/2004	12/7/2004
0412059-008B	Soil	0.03033	0	0	1	32.971	12/7/2004	12/7/2004
0412059-008BMS	Soil	0.03039	0	0	1	32.906	12/7/2004	12/7/2004
0412059-008BMSD	Soil	0.03075	0	0	1	32.520	12/7/2004	12/7/2004
0412059-009B	Soil	0.03081	0	0	1	32.457	12/7/2004	12/7/2004
0412059-010B	Soil	0.03081	0	0	1	32.457	12/7/2004	12/7/2004
0412085-001B	Soil	0.0307	0	0	1	32.573	12/7/2004	12/8/2004
0412085-002B	Soil	0.03072	0	0	1	32.552	12/7/2004	12/8/2004
0412085-003B	Soil	0.03044	0	0	1	32.852	12/7/2004	12/8/2004
0412085-005B	Soil	0.03018	0	0	1	33.135	12/7/2004	12/8/2004
0412085-006B	Soil	0.03036	0	0	1	32.938	12/7/2004	12/8/2004
0412099-001B	Soil	0.03058	0	0	1	32.701	12/7/2004	12/8/2004
0412099-002B	Soil	0.03032	0	0	1	32.982	12/7/2004	12/8/2004
0412099-003B	Soil	0.03073	0	0	1	32.541	12/7/2004	12/8/2004
0412130-003A	Soil	0.0307	0	0	1	32.573	12/7/2004	12/8/2004
LCS-12127-SVOC		0.03	0	0	1	33.333	12/7/2004	12/7/2004
MB-12127-SVOC		0.03	0	0	1	33.333	12/7/2004	12/7/2004

CLIENT: Burns & McDonnell

Work Order: 0412059

Project: 32088, Willow Street Station- General Iron

Test No: SW8270C-SIM Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Date: 15-Dec-04

Sample ID	DCBZ12D4	NO2BZD5	PHEN2F	PHEND14		
0412059-008B	63.6	80.7	59.4	59.8		
0412059-002B	67.6	85.5	59.3	60.0		
0412059-003B	47.5	62.5	47.0	51.7		
0412059-004B	49.8	62.5	47.0	52.6		
0412059-001B	54.1	71.9	61.3	59.0		
0412059-005B	50.5	66.8	121 *	72.8		
0412059-009B	51.3	45.8	17.2 *	129		
0412059-005B:10	67.4	87.0	81.2	83.2		
0412059-009B:10	73.0	121 *	64.0	98.6		
0412059-007B	45.0	60.0	46.5	65.1		
0412059-007BMS	72.3	96.4	81.2	126		
0412059-007BMSD	62.7	83.8	73.1	133		
MB-12126-PNA	82.2	92.6	78.2	88.2		
LCS-12126-PNA	75.6	85.4	73.1	83.6		
0412059-006B	57.6	73.0	51.4	55.5		
0412059-008BMS	65.9	83.2	74.1	85.4		
0412059-008BMSD	68.3	88.8	73.3	87.2		
0412059-010B	51.1	62.8	43.9	53.5		
MB-12147-PNA	83.0	91.2	76.2	82.2		
LCS-12147-PNA	68.5	75.4	64.3	72.7		
0411538-005BMS	88.4	93.6	82.4	98.2		
0411538-005BMSD	92.0	100	88.0	102	 	

Acronym		Surrogate		QC Limits	
DCBZ12D4 NO2BZD5 PHEN2F PHEND14	= = =	1,2-Dichlorol Nitrobenzene 2-Fluorobiph 4-Terphenyl-	e-d5 enyl	20-130 23-120 30-115 18-137	

^{*} Surrogate recovery outside acceptance limits

PREP BATCH REPORT

Page: 1 of 2

Prep Start Date: 12/7/2004 12:27:03
Prep End Date: 12/8/2004 9:59:21 P

Prep Factor Units:

Prep Batch 12126 Prep Code: 3550_PNA Technician: JT mL/Kg

Sample ID	Matrix	pH SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0412058-001B	Soil	0.03068	0	0	1	32.595	12/7/2004	12/7/2004
0412058-002B	Soil	0.03087	0	0	1	32.394	12/7/2004	12/7/2004
0412058-003B	Soil	0.03064	0	0	1	32.637	12/7/2004	12/7/2004
0412059-001B	Soil	0.03032	0	0	1	32.982	12/7/2004	12/7/2004
0412059-002B	Soil	0.03035	0	0	1	32.949	12/7/2004	12/7/2004
0412059-003B	Soil	0.03067	0	0	1	32.605	12/7/2004	12/7/2004
0412059-004B	Soil	0.03038	0	0	1	32.916	12/7/2004	12/7/2004
0412059-005B	Soil	0.03026	0	0	1	33.047	12/7/2004	12/7/2004
0412059-006B	Soil	0.03025	0	0	1	33.058	12/7/2004	12/7/2004
0412059-007B	Soil	0.03031	0	0	1	32.992	12/7/2004	12/7/2004
0412059-007BMS	Soil	0.03031	0	0	1	32.992	12/7/2004	12/7/2004
0412059-007BMSD	Soil	0.03047	0	0	1	32.819	12/7/2004	12/7/2004
0412059-008B	Soil	0.03033	0	0	1	32.971	12/7/2004	12/7/2004
0412059-008BMS	Soil	0.03039	0	0	1	32.906	12/7/2004	12/7/2004
0412059-008BMSD	Soil	0.0305	0	0	1	32.787	12/7/2004	12/7/2004
0412059-009B	Soil	0.03081	0	0	1	32.457	12/7/2004	12/7/2004
0412059-010B	Soil	0.03081	0	0	1	32.457	12/7/2004	12/7/2004
0412085-001B	Soil	0.0307	0	0	1	32.573	12/7/2004	12/8/2004
0412085-002B	Soil	0.03072	0	0	1	32.552	12/7/2004	12/8/2004
0412085-003B	Soil	0.03044	0	0	1	32.852	12/7/2004	12/8/2004
0412085-005B	Soil	0.03018	0	0	1	33.135	12/7/2004	12/8/2004
0412085-006B	Soil	0.03036	0	0	1	32.938	12/7/2004	12/8/2004
0412086-001A	Soil	0.03052	0	0	1	32.765	12/7/2004	12/8/2004
0412130-003A	Soil	0.0307	0	0	1	32.573	12/7/2004	12/8/2004
LCS-12126-PNA		0.03	0	0	1	33.333	12/7/2004	12/7/2004

PREP BATCH REPORT

Page: 2 of 2

Prep Start Date: 12/7/2004 12:27:03
Prep End Date: 12/8/2004 9:59:21 P

Prep Factor Units:

Prep Batch 12126 Prep Code: 3550_PNA Technician: JT mL/Kg

Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
MB-12126-PNA			0.03	0	0	1	33.333	12/7/2004	12/7/2004

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 12/8/2004 4:18:58 P Prep End Date: 12/9/2004 10:37:20

Prep Factor Units:

Prep Batch 12147 Prep Code: 3550_PNA Technician: JT mL/Kg

Sample ID	Matrix	pH S	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0411538-005B	Soil		0.02021	0	0	1	49.480	12/8/2004	12/9/2004
0411538-005BMS	Soil		0.01528	0	0	1	65.445	12/8/2004	12/9/2004
0411538-005BMSD	Soil		0.01141	0	0	1	87.642	12/8/2004	12/9/2004
0412059-008B	Soil		0.03003	0	0	1	33.300	12/8/2004	12/8/2004
0412059-008BMS	Soil		0.03061	0	0	1	32.669	12/8/2004	12/8/2004
0412059-008BMSD	Soil		0.03035	0	0	1	32.949	12/8/2004	12/8/2004
0412087-001B	Soil		0.03031	0	0	1	32.992	12/8/2004	12/8/2004
0412087-002B	Soil		0.03053	0	0	1	32.755	12/8/2004	12/8/2004
0412087-003B	Soil		0.03056	0	0	1	32.723	12/8/2004	12/8/2004
0412087-004B	Soil		0.03034	0	0	1	32.960	12/8/2004	12/8/2004
0412090-001B	Soil		0.03051	0	0	1	32.776	12/8/2004	12/8/2004
0412091-001B	Soil		0.01006	0	0	0.5	49.702	12/8/2004	12/8/2004
0412091-002B	Soil		0.03062	0	0	1	32.658	12/8/2004	12/8/2004
0412091-003B	Soil		0.03018	0	0	1	33.135	12/8/2004	12/8/2004
0412091-004B	Soil		0.03026	0	0	1	33.047	12/8/2004	12/8/2004
0412091-005B	Soil		0.0304	0	0	1	32.895	12/8/2004	12/8/2004
0412091-006B	Soil		0.03042	0	0	1	32.873	12/8/2004	12/8/2004
0412099-001B	Soil		0.03032	0	0	1	32.982	12/8/2004	12/8/2004
0412099-002B	Soil		0.03073	0	0	1	32.541	12/8/2004	12/8/2004
0412099-003B	Soil		0.0302	0	0	1	33.113	12/8/2004	12/8/2004
LCS-12147-PNA			0.03	0	0	1	33.333	12/8/2004	12/8/2004
MB-12147-PNA			0.03	0	0	1	33.333	12/8/2004	12/8/2004

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 12/7/2004 8:14:46 P

Prep End Date:

Prep Factor Units:

Prep Batch 12138 Prep Code: 3580_TPH Technician: CDC mL/Kg

Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0412059-001B	Soil		0.00525	0	0	5	952.381	12/7/2004	12/8/2004
0412059-002B	Soil		0.00504	0	0	5	992.063	12/7/2004	12/8/2004
0412059-003B	Soil		0.00517	0	0	5	967.118	12/7/2004	12/8/2004
0412059-004B	Soil		0.00557	0	0	5	897.666	12/7/2004	12/8/2004
0412059-005B	Soil		0.00525	0	0	5	952.381	12/7/2004	12/8/2004
0412059-006B	Soil		0.00546	0	0	5	915.751	12/7/2004	12/8/2004
0412059-007B	Soil		0.00532	0	0	5	939.850	12/7/2004	12/8/2004
0412059-007BMS	Soil		0.00523	0	0	5	956.023	12/7/2004	12/8/2004
0412059-007BMSD	Soil		0.00509	0	0	5	982.318	12/7/2004	12/8/2004
0412059-008B	Soil		0.00536	0	0	5	932.836	12/7/2004	12/8/2004
0412059-008BMS	Soil		0.00506	0	0	5	988.142	12/7/2004	12/8/2004
0412059-008BMSD	Soil		0.00509	0	0	5	982.318	12/7/2004	12/8/2004
0412059-009B	Soil		0.00513	0	0	5	974.659	12/7/2004	12/8/2004
0412059-010B	Soil		0.00591	0	0	5	846.024	12/7/2004	12/8/2004
0412085-001B	Soil		0.00559	0	0	5	894.454	12/7/2004	12/8/2004
0412085-002B	Soil		0.00529	0	0	5	945.180	12/7/2004	12/8/2004
0412085-003B	Soil		0.00552	0	0	5	905.797	12/7/2004	12/8/2004
0412085-005B	Soil		0.00521	0	0	5	959.693	12/7/2004	12/8/2004
0412085-006B	Soil		0.00524	0	0	5	954.198	12/7/2004	12/8/2004
LCS-12138-TPH			0.005	0	0	5	1000.000	12/7/2004	12/8/2004
MB-12138-TPH			0.005	0	0	5	1000.000	12/7/2004	12/8/2004

Date: *December 15, 2004*

CLIENT: Burns & McDonnell

Work Order: 0412059

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12138

Sample ID MB-12138-TPH	SampType:	MBLK	TestCod	e: TPH	Units: mg/Kg		Prep Date	e: 12/7/2 0	004	Run ID: GC	-FID_04120	A80
Client ID: ZZZZZ	Batch ID:	12138	TestN	o: SW8015N	1		Analysis Date	e: 12/8/2 0	004	SeqNo: 320	0353	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		ND	20									*
TPH (Diesel)		ND	20									*
TPH (Oil)		ND	20									*
Sample ID LCS-12138-TPH	SampType:	LCS	TestCod	e: TPH	Units: mg/Kg		Prep Date	e: 12/7/2 0	004	Run ID: GC	-FID_04120)8A
Client ID: ZZZZZ	Batch ID:	12138	TestN	o: SW8015N	1		Analysis Date	e: 12/8/2 0	004	SeqNo: 320	0354	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		139.4	20	200	0	69.7	30	150	0	0		*
TPH (Diesel)		217.4	20	200	0	109	30	150	0	0		*
TPH (Oil)		299.9	20	200	0	150	30	150	0	0		*
Sample ID 0412059-007BMS	SampType:	мѕ	TestCod	e: TPH	Units: mg/Kg	-dry	Prep Date	e: 12/7/2 0	004	Run ID: GC	-FID_04120	18A
Client ID: WSS-SB58-001	Batch ID:	12138	TestN	o: SW8015N	1		Analysis Date	e: 12/9/2 0	004	SeqNo: 320	0362	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		228.7	32	317.2	0	72.1	30	150	0	0		*
TPH (Diesel)		874	32	317.2	302	180	30	150	0	0		S*
TPH (Oil)		2083	32	317.2	1099	310	30	150	0	0		S*
Sample ID 0412059-008BMS	SampType:	MS	TestCod	e: TPH	Units: mg/Kg	-dry	Prep Date	e: 12/7/2 0	004	Run ID: GC	-FID_04120	8A
Client ID: WSS-SB58-002	Batch ID:	12138	TestN	o: SW8015N	1		Analysis Date	e: 12/9/2 0	004	SeqNo: 320	0365	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
						70.0	30	150	0	0		*
TPH (Gasoline)		174	25	247.8	0	70.2	30	130	U	U		
TPH (Gasoline) TPH (Diesel)		174 296.8	25 25	247.8 247.8	0 5.454	70.2 118	30	150	0	0		*

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

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Work Order:

0412059

ANALYTICAL QC SUMMARY REPORT

Project: 32088, Willow Street Station- General Iron

BatchID: 12138

Sample ID 041	2059-007BMSD	SampType:	MSD	TestCoo	e: TPH	Units: mg/k	(g-dry	Prep Dat	e: 12/7/2 0	004	Run ID: GC	-FID_041208	BA
Client ID: WS	S-SB58-001	Batch ID:	12138	TestN	o: SW8015M			Analysis Da	te: 12/9/2 0	004	SeqNo: 320	0363	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)			293.2	33	326	0	89.9	30	150	228.7	24.7	25	*
TPH (Diesel)			1474	33	326	302	360	30	150	874	51.1	25	SR*
TPH (Oil)			3292	33	326	1099	673	30	150	2083	45.0	25	SR*
Sample ID 041	2059-008BMSD	SampType:	MSD	TestCoo	e: TPH	Units: mg/l	(g-dry	Prep Dat	e: 12/7/2 0	004	Run ID: GC	-FID_041208	BA
Client ID: WS	0.0050.000												
Client ID. W3.	S-SB58-002	Batch ID:	12138	TestN	o: SW8015M	l		Analysis Da	te: 12/9/2 0	004	SeqNo: 320	0366	
	S-SB38-002	Batch ID:	12138 Result	TestN PQL	o: SW8015M SPK value	SPK Ref Val	%REC	,		004 RPD Ref Val	SeqNo: 320 %RPD	0366 RPDLimit	Qual
Analyte	S-SB58-002	Batch ID:						,			•		Qual *
Analyte TPH (Gasoline) TPH (Diesel)	S-SB38-002	Batch ID:	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	

Work Order: 0412059

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12126

Sample ID MB-12126-PNA	SampType: MBLK		le: PNA_SOIL	Units: mg/Kg			: 12/7/20			OC-4_04120	07A
Client ID: ZZZZZ	Batch ID: 12126	TestN	lo: SW8270C- \$	SI		Analysis Date	e: 12/7/20	04	SeqNo: 319	9326	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.025	0	0	0	0	0	0	0		
Acenaphthylene	ND	0.025	0	0	0	0	0	0	0		
Anthracene	ND	0.025	0	0	0	0	0	0	0		
Benz(a)anthracene	ND	0.025	0	0	0	0	0	0	0		
Benzo(a)pyrene	ND	0.025	0	0	0	0	0	0	0		
Benzo(b)fluoranthene	ND	0.025	0	0	0	0	0	0	0		
Benzo(g,h,i)perylene	ND	0.025	0	0	0	0	0	0	0		
Benzo(k)fluoranthene	ND	0.025	0	0	0	0	0	0	0		
Chrysene	ND	0.025	0	0	0	0	0	0	0		
Dibenz(a,h)anthracene	ND	0.025	0	0	0	0	0	0	0		
Fluoranthene	ND	0.025	0	0	0	0	0	0	0		
Fluorene	ND	0.025	0	0	0	0	0	0	0		
Indeno(1,2,3-cd)pyrene	ND	0.025	0	0	0	0	0	0	0		
Naphthalene	ND	0.025	0	0	0	0	0	0	0		
Phenanthrene	ND	0.025	0	0	0	0	0	0	0		
Pyrene	ND	0.025	0	0	0	0	0	0	0		
Sample ID LCS-12126-PNA	SampType: LCS	TestCoo	le: PNA_SOIL	Units: mg/Kg		Prep Date	: 12/7/20	04	Run ID: SV	OC-4_04120	07A
Client ID: ZZZZZ	Batch ID: 12126	TestN	o: SW8270C-	SI		Analysis Date	e: 12/7/20	04	SeqNo: 319	9327	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.1207	0.025	0.167	0	72.3	30	130	0	0		
Acenaphthylene	0.1253	0.025	0.167	0	75	30	130	0	0		
Anthracene	0.1293	0.025	0.167	0	77.4	30	130	0	0		
Benz(a)anthracene	0.1287	0.025	0.167	0	77	30	130	0	0		
Benzo(a)pyrene	0.1397	0.025	0.167	0	83.6	30	130	0	0		
Benzo(b)fluoranthene	0.1317	0.025	0.167	0	78.8	30	130	0	0		
Benzo(g,h,i)perylene	0.1323	0.025	0.167	0	79.2	30	130	0	0		
Benzo(k)fluoranthene	0.1477	0.025	0.167	0	88.4	30	130	0	0		
Chrysene	0.1437	0.025	0.167	0	86	30	130	0	0		
Dibenz(a,h)anthracene	0.1373	0.025	0.167	0	82.2	30	130	0	0		

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^{* -} Non Accredited Parameter

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R - RPD outside accepted recovery limits

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B - Analyte detected in the associated Method Blanl

Work Order:

0412059

ANALYTICAL QC SUMMARY REPORT

Project: 32088, Willow Street Station- General Iron

BatchID: 12126

Sample ID LCS-12126-PNA Client ID: ZZZZZ	SampType: Batch ID:			e: PNA_SOII o: SW8270C	0 0		Prep Dat				/OC-4_0412	07A
Client ID: ZZZZZ	Batch ID:	12126	restivo): SW8270C	-31		Analysis Da	te: 12///20	JU4	SeqNo: 31	9327	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoranthene		0.1313	0.025	0.167	0	78.6	30	130	0	0		
Fluorene		0.125	0.025	0.167	0	74.9	30	130	0	0		
Indeno(1,2,3-cd)pyrene		0.1353	0.025	0.167	0	81	30	130	0	0		
Naphthalene		0.1113	0.025	0.167	0	66.7	30	130	0	0		
Phenanthrene		0.1157	0.025	0.167	0	69.3	30	130	0	0		
Pyrene		0.1253	0.025	0.167	0	75	30	130	0	0		
Sample ID 0412059-008BMS	SampType:	MS	TestCode	e: PNA_SOI	L-B Units: mg/Kg	-dry	Prep Dat	e: 12/7/2 0	004	Run ID: S\	/OC-4_0412	07A
Client ID: WSS-SB58-002	Batch ID:	12126	TestNo	: SW8270C	-SI		Analysis Da	te: 12/7/2 0	004	SeqNo: 31	9331	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene		0.2455	0.031	0.2067	0.07153	84.2	30	130	0	0		
Acenaphthylene		0.1882	0.031	0.2067	0.01364	84.4	30	130	0	0		
Anthracene		0.2897	0.031	0.2067	0.07856	102	30	130	0	0		
Benz(a)anthracene		0.2592	0.031	0.2067	0.06492	93.9	30	130	0	0		
Benzo(b)fluoranthene		0.2327	0.031	0.2067	0.03845	94	30	130	0	0		
Benzo(k)fluoranthene		0.2389	0.031	0.2067	0.03845	97	30	130	0	0		
Benzo(g,h,i)perylene		0.1762	0.031	0.2067	0.02522	73	30	130	0	0		
Benzo(a)pyrene		0.2794	0.031	0.2067	0.05871	107	30	130	0	0		
Chrysene		0.2827	0.031	0.2067	0.06119	107	30	130	0	0		
Dibenz(a,h)anthracene		0.17	0.031	0.2067	0.007856	78.4	30	130	0	0		
Fluoranthene		0.3697	0.031	0.2067	0.1398	111	30	130	0	0		
Fluorene		0.2592	0.031	0.2067	0.08807	82.8	30	130	0	0		
Indeno(1,2,3-cd)pyrene		0.1816	0.031	0.2067	0.02398	76.2	30	130	0	0		
Naphthalene		0.6978	0.031	0.2067	0.3887	150	30	130	0	0		SE
Phenanthrene		0.482	0.031	0.2067	0.2365	119	30	130	0	0		Ε
Pyrene		0.3396	0.031	0.2067	0.1149	109	30	130	0	0		

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Work Order:

0412059

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12126

Sample ID 0412059-007BMS	SampType: MS	TestCo	de: PNA_SOIL-E	Units: mg/	Kg-dry	Prep Dat	e: 12/7/2 0	004	Run ID: SV	OC-3_04120)8A
Client ID: WSS-SB58-001	Batch ID: 12126	TestN	lo: SW8270C-S			Analysis Da	te: 12/8/2 0	004	SeqNo: 320	0057	
Analyte	Result	PQL	SPK value S	PK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	2.862	0.041	0.2743	2.502	131	30	130	0	0		SE
Acenaphthylene	0.5206	0.041	0.2743	0.393	46.5	30	130	0	0		
Anthracene	5.312	0.041	0.2743	5.325	-4.59	30	130	0	0		SE
Benz(a)anthracene	8.799	0.041	0.2743	8.593	75	30	130	0	0		Е
Benzo(b)fluoranthene	4.45	0.041	0.2743	3.313	415	30	130	0	0		SE
Benzo(k)fluoranthene	2.697	0.041	0.2743	2.576	44.1	30	130	0	0		E
Benzo(g,h,i)perylene	1.367	0.041	0.2743	1.041	119	30	130	0	0		Е
Benzo(a)pyrene	3.46	0.041	0.2743	3.327	48.7	30	130	0	0		E
Chrysene	5.214	0.041	0.2743	4.281	340	30	130	0	0		SE
Dibenz(a,h)anthracene	0.6865	0.041	0.2743	0.4489	86.6	30	130	0	0		E
Fluoranthene	13.3	0.041	0.2743	12.25	380	30	130	0	0		SE
Fluorene	3.89	0.041	0.2743	3.638	91.8	30	130	0	0		E
Indeno(1,2,3-cd)pyrene	1.625	0.041	0.2743	1.202	154	30	130	0	0		SE
Naphthalene	2.912	0.041	0.2743	2.65	95.4	30	130	0	0		E
Phenanthrene	14.08	0.041	0.2743	13.5	209	30	130	0	0		SE
Pyrene	11.29	0.041	0.2743	10.63	241	30	130	0	0		SE
Sample ID 0412059-008BMSD	SampType: MSD	TestCo	de: PNA_SOIL-E	Units: mg/	Kg-dry	Prep Dat	e: 12/7/2 0	004	Run ID: SV	OC-4_04120)7A
Client ID: WSS-SB58-002	Batch ID: 12126	TestN	lo: SW8270C-S			Analysis Da	te: 12/7/2 0	004	SeqNo: 319	9332	
Analyte	Result	PQL	SPK value S	PK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.2072	0.031	0.206	0.07153	65.9	30	130	0.2455	16.9	50	
Acenaphthylene	0.1698	0.031	0.206	0.01364	75.8	30	130	0.1882	10.3	50	
								0.2897	11.2	50	
Anthracene	0.259	0.031	0.206	0.07856	87.6	30	130	0.2097	11.2		
Anthracene Benz(a)anthracene	0.259 0.2241	0.031 0.031	0.206 0.206	0.07856 0.06492	87.6 77.3	30 30	130 130	0.2592	14.5	50	
Benz(a)anthracene										50 50	
Benz(a)anthracene Benzo(b)fluoranthene	0.2241	0.031	0.206	0.06492	77.3	30	130	0.2592	14.5		
Benz(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene	0.2241 0.2105	0.031 0.031	0.206 0.206	0.06492 0.03845	77.3 83.5	30 30	130 130	0.2592 0.2327	14.5 10.0	50	
Benz(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene	0.2241 0.2105 0.2311	0.031 0.031 0.031	0.206 0.206 0.206	0.06492 0.03845 0.03845	77.3 83.5 93.5	30 30 30	130 130 130	0.2592 0.2327 0.2389	14.5 10.0 3.34	50 50	
	0.2241 0.2105 0.2311 0.1657	0.031 0.031 0.031 0.031	0.206 0.206 0.206 0.206	0.06492 0.03845 0.03845 0.02522	77.3 83.5 93.5 68.2	30 30 30 30	130 130 130 130	0.2592 0.2327 0.2389 0.1762	14.5 10.0 3.34 6.14	50 50 50	

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Work Order: 0412059

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12126

Sample ID	0412059-008BMSD	SampType: MSD	TestCo	de: PNA_SOI	L-B Units: mg	/Kg-dry	Prep Date	: 12/7/20	004	Run ID: SV	OC-4_04120)7A
Client ID:	WSS-SB58-002	Batch ID: 12126	TestN	No: SW8270C	-SI		Analysis Date	e: 12/7/2 0	004	SeqNo: 319	9332	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
												Quai
Fluoranthe	ene	0.3018	0.031	0.206	0.1398	78.7	30	130	0.3697	20.2	50	
Fluorene		0.2212	0.031	0.206	0.08807	64.6	30	130	0.2592	15.8	50	
Indeno(1,2	2,3-cd)pyrene	0.1743	0.031	0.206	0.02398	73	30	130	0.1816	4.06	50	
Naphthale	ene	0.4835	0.031	0.206	0.3887	46.1	30	130	0.6978	36.3	50	E
Phenanthr	rene	0.3713	0.031	0.206	0.2365	65.4	30	130	0.482	25.9	50	
Pyrene		0.273	0.031	0.206	0.1149	76.7	30	130	0.3396	21.7	50	
Sample ID	0412059-007BMSD	SampType: MSD	TestCo	de: PNA_SOI	L-B Units: mg	/Kg-dry	Prep Date	e: 12/7/20	004	Run ID: SV	OC-3_04120)8A
Client ID:	WSS-SB58-001	Batch ID: 12126	TestN	No: SW8270C	-SI		Analysis Date	e: 12/8/2 0	004	SeqNo: 320	0058	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphth	hene	3.377	0.041	0.2728	2.502	321	30	130	2.862	16.5	50	SE
Acenaphth	hylene	0.544	0.041	0.2728	0.393	55.3	30	130	0.5206	4.40	50	
Anthracen	ne	6.604	0.041	0.2728	5.325	469	30	130	5.312	21.7	50	SE
Benz(a)an	nthracene	9.881	0.041	0.2728	8.593	472	30	130	8.799	11.6	50	SE
Benzo(b)fl	luoranthene	4.214	0.041	0.2728	3.313	330	30	130	4.45	5.44	50	SE
Benzo(k)fl	luoranthene	2.979	0.041	0.2728	2.576	148	30	130	2.697	9.92	50	SE
Benzo(g,h	n,i)perylene	1.191	0.041	0.2728	1.041	55.3	30	130	1.367	13.7	50	E
Benzo(a)p	oyrene	3.456	0.041	0.2728	3.327	47.3	30	130	3.46	0.132	50	E
Chrysene		5.293	0.041	0.2728	4.281	371	30	130	5.214	1.51	50	SE
Dibenz(a,ł	h)anthracene	0.7264	0.041	0.2728	0.4489	102	30	130	0.6865	5.66	50	E
Fluoranthe	ene	17.93	0.041	0.2728	12.25	2080	30	130	13.3	29.7	50	SE
Fluorene		4.786	0.041	0.2728	3.638	421	30	130	3.89	20.7	50	SE
Indeno(1,2	2,3-cd)pyrene	1.391	0.041	0.2728	1.202	69.3	30	130	1.625	15.6	50	E
Naphthale	ne	3.092	0.041	0.2728	2.65	162	30	130	2.912	6.02	50	SE
Phenanthr	rene	20.47	0.041	0.2728	13.5	2550	30	130	14.08	37.0	50	SE
Pyrene		14.97	0.041	0.2728	10.63	1590	30	130	11.29	28.0	50	SE

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Work Order: 0412059

Project:

ANALYTICAL QC SUMMARY REPORT

32088, Willow Street Station- General Iron

BatchID: 12127

Sample ID MB-12127-SVOC	SampType: MBLK	TestCode: SVOC_SOIL Units: mg/Kg	Prep Date: 12/7/2004	Run ID: SVOC-2_041207B
Client ID: ZZZZZ	Batch ID: 12127	TestNo: SW8270C	Analysis Date: 12/7/2004	SeqNo: 319355
Analyte	Result	PQL SPK value SPK Ref Val %REC	LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Analyte			LOWEITHE THIGHEITHE TO DITE VAI	7011 D REDLITIK Quai
1,2,4-Trichlorobenzene	ND	0.17		
1,2-Dichlorobenzene	ND	0.17		
1,3-Dichlorobenzene	ND	0.17		
1,4-Dichlorobenzene	ND	0.17		
2, 2'-oxybis(1-Chloropropane)	ND	0.17		
2,4,5-Trichlorophenol	ND	0.33		
2,4,6-Trichlorophenol	ND	0.17		
2,4-Dichlorophenol	ND	0.17		
2,4-Dimethylphenol	ND	0.17		
2,4-Dinitrophenol	ND	0.80		
2,4-Dinitrotoluene	ND	0.17		
2,6-Dinitrotoluene	ND	0.17		
2-Chloronaphthalene	ND	0.17		
2-Chlorophenol	ND	0.17		
2-Methylnaphthalene	ND	0.17		
2-Methylphenol	ND	0.17		
2-Nitroaniline	ND	0.80		
2-Nitrophenol	ND	0.17		
3,3´-Dichlorobenzidine	ND	0.33		
3-Nitroaniline	ND	0.80		
4,6-Dinitro-2-methylphenol	ND	0.80		
4-Bromophenyl phenyl ether	ND	0.17		
4-Chloro-3-methylphenol	ND	0.17		
4-Chloroaniline	ND	0.17		
4-Chlorophenyl phenyl ether	ND	0.17		
4-Methylphenol	ND	0.17		
4-Nitroaniline	ND	0.80		
4-Nitrophenol	ND	0.80		
Acenaphthene	ND	0.17		
Acenaphthylene	ND	0.17		
Aniline	ND	0.17		

Qualifiers:

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Work Order:

Project:

Burns & McDor

0412059 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12127

Sample ID MB-12127-SVOC	SampType: MBLK	TestCode: SVOC_SOIL Units: mg/Kg	Prep Date: 12/7/2004	Run ID: SVOC-2_041207B
Client ID: ZZZZZ	Batch ID: 12127	TestNo: SW8270C	Analysis Date: 12/7/2004	SeqNo: 319355
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Anthracene	ND	0.17		
Benz(a)anthracene	ND	0.17		
Benzidine	ND	0.17		
Benzo(a)pyrene	ND	0.17		
Benzo(b)fluoranthene	ND	0.17		
Benzo(g,h,i)perylene	ND	0.17		
Benzo(k)fluoranthene	ND	0.17		
Benzoic acid	ND	0.80		
Benzyl alcohol	ND	0.17		
Bis(2-chloroethoxy)methane	ND	0.17		
Bis(2-chloroethyl)ether	ND	0.17		
Bis(2-ethylhexyl)phthalate	ND	0.17		
Butyl benzyl phthalate	ND	0.17		
Carbazole	ND	0.17		
Chrysene	ND	0.17		
Di-n-butyl phthalate	ND	0.17		
Di-n-octyl phthalate	ND	0.17		
Dibenz(a,h)anthracene	ND	0.17		
Dibenzofuran	ND	0.17		
Diethyl phthalate	ND	0.17		
Dimethyl phthalate	ND	0.17		
Fluoranthene	ND	0.17		
Fluorene	ND	0.17		
Hexachlorobenzene	ND	0.17		
Hexachlorobutadiene	ND	0.17		
Hexachlorocyclopentadiene	ND	0.17		
Hexachloroethane	ND	0.17		
Indeno(1,2,3-cd)pyrene	ND	0.17		
Isophorone	ND	0.17		
N-Nitrosodi-n-propylamine	ND	0.17		
N-Nitrosodimethylamine	ND	0.17		

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Work Order: 0412059

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ANALYTICAL QC SUMMARY REPORT

Project: 32088, Willow Street Station- General Iron BatchID: 12127

Sample ID MB-12127-SVOC	SampType:	MBLK	TestCode	e: SVOC_SC	OIL Units: mg/Kg		Prep Date:	12/7/20	004	Run ID: SV	OC-2_0412	07B
Client ID: ZZZZZ	Batch ID:	12127	TestNo	: SW8270C			Analysis Date	12/7/20	004	SeqNo: 31	9355	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
N-Nitrosodiphenylamine		ND	0.17									
Naphthalene		ND	0.17									
Nitrobenzene		ND	0.17									
Pentachlorophenol		ND	0.80									
Phenanthrene		ND	0.17									
Phenol		ND	0.17									
Pyrene		ND	0.17									
Pyridine		ND	0.17									
Sample ID LCS-12127-SVOC	SampType:	LCS	TestCode	e: SVOC_SC	OIL Units: mg/Kg		Prep Date:	12/7/20	004	Run ID: SV	OC-2_0412	07B
Client ID: ZZZZZ	Batch ID:	12127	TestNo	: SW8270C			Analysis Date	12/7/20	004	SeqNo: 319	9356	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene		1.25	0.17	1.667	0	75	55	106	0	0		
1,4-Dichlorobenzene		1.156	0.17	1.667	0	69.3	55	90	0	0		
2,4-Dinitrotoluene		1.513	0.17	1.667	0	90.8	55	101	0	0		
2-Chlorophenol		2.499	0.17	3.333	0	75	61	91	0	0		
4-Chloro-3-methylphenol		3.143	0.17	3.333	0	94.3	62	100	0	0		
4-Nitrophenol		3.398	0.80	3.333	0	102	53	123	0	0		
Acenaphthene		1.318	0.17	1.667	0	79.1	65	101	0	0		
N-Nitrosodi-n-propylamine		1.741	0.17	1.667	0	104	55	100	0	0		S
Pentachlorophenol		3.213	0.80	3.333	0	96.4	40	120	0	0		
Phenol		3.045	0.17	3.333	0	91.4	60	91	0	0		S
Pyrene		1.518	0.17	1.667	0	91.1	50	131	0	0		
Sample ID 0412059-007BMS	SampType:	MS	TestCode	e: SVOC_SC	OIL- Units: mg/Kg	-dry	Prep Date:	12/7/20	004	Run ID: SV	OC-2_04120	07B
Client ID: WSS-SB58-001	Batch ID:	12127	TestNo	: SW8270C			Analysis Date	12/8/20	004	SeqNo: 31	9418	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit F	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloro-3-methylphenol		6.017	0.54	5.477	0	110	62	100	0	0		S
T Official of fricting priction												

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order: 0412059

Project:

0412059

32088, Willow Street Station-General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12127

Sample ID 0412059-007BMS Client ID: WSS-SB58-001	SampType: MS Batch ID: 12127		de: SVOC_S0 lo: SW8270C	OIL- Units: mg		Prep Date Analysis Dat	e: 12/7/2 0		Run ID: SV SeqNo: 319		07B
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	1.558	0.54	2.739	0	56.9	55	90	0	0		
2,4-Dinitrotoluene	2.545	0.28	2.739	0	92.9	55	101	0	0		
4-Nitrophenol	3.842	2.6	5.477	0	70.1	53	123	0	0		
N-Nitrosodi-n-propylamine	2.295	0.28	2.739	0	83.8	55	100	0	0		
Pentachlorophenol	2.754	2.6	5.477	0	50.3	40	120	0	0		
Phenol	4.336	0.54	5.477	0	79.2	60	91	0	0		
1,2,4-Trichlorobenzene	2.062	0.54	2.739	0	75.3	55	106	0	0		
Sample ID 0412059-008BMS	SampType: MS	TestCoo	de: SVOC_SC	OIL- Units: mg	ı/Kg-dry	Prep Date	e: 12/7/2 0	004	Run ID: SV	OC-2_04120	07B
Client ID: WSS-SB58-002	Batch ID: 12127	TestN	lo: SW8270C			Analysis Dat	e: 12/8/2 0	004	SeqNo: 319	9426	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloro-3-methylphenol	3.858	0.41	4.126	0	93.5	62	100	0	0		
2-Chlorophenol	3.017	0.41	4.126	0	73.1	61	91	0	0		
1,4-Dichlorobenzene	1.417	0.41	2.064	0	68.6	55	90	0	0		
2,4-Dinitrotoluene	1.416	0.21	2.064	0	68.6	55	101	0	0		
4-Nitrophenol	2.618	2.0	4.126	0	63.5	53	123	0	0		
N-Nitrosodi-n-propylamine	2.165	0.21	2.064	0	105	55	100	0	0		S
Pentachlorophenol	0.7362	2.0	4.126	0	17.8	40	120	0	0		JS
Phenol	3.488	0.41	4.126	0	84.5	60	91	0	0		
1,2,4-Trichlorobenzene	1.746	0.41	2.064	0	84.6	55	106	0	0		
Sample ID 0412059-007BMSD	SampType: MSD	TestCoo	de: SVOC_SC	OIL- Units: mg	/Kg-dry	Prep Date	e: 12/7/2 0	004	Run ID: SV	OC-2_04120	07B
Client ID: WSS-SB58-001	Batch ID: 12127	TestN	lo: SW8270C			Analysis Dat	e: 12/8/2 0	004	SeqNo: 319	9421	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloro-3-methylphenol	5.496	0.54	5.479	0	100	62	100	6.017	9.05	33	
2-Chlorophenol	3.706	0.54	5.479	0	67.6	61	91	3.486	6.11	50	
1,4-Dichlorobenzene	1.673	0.54	2.74	0	61.1	55	90	1.558	7.15	27	
2,4-Dinitrotoluene	2.354	0.28	2.74	0	85.9	55	101	2.545	7.80	47	

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Work Order:

Project:

Phenol

1,2,4-Trichlorobenzene

0412059

32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12127

91

106

3.488

1.746

60

55

Sample ID 0412059-007BMSD	SampType:	MSD	TestCoo	de: SVOC_S	OIL- Units: mg/I	Kg-dry	Prep Dat	e: 12/7/2 0	004	Run ID: SV	OC-2_04120)7B
Client ID: WSS-SB58-001	Batch ID:	12127	TestN	lo: SW8270C	;		Analysis Da	te: 12/8/2 0	004	SeqNo: 31	9421	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
N-Nitrosodi-n-propylamine		2.423	0.28	2.74	0	88.4	55	100	2.295	5.42	38	
Pentachlorophenol		2.15	2.6	5.479	0	39.2	40	120	2.754	0	47	JS
Phenol		4.401	0.54	5.479	0	80.3	60	91	4.336	1.49	35	
1,2,4-Trichlorobenzene		2.183	0.54	2.74	0	79.7	55	106	2.062	5.69	23	
Sample ID 0412059-008BMSD	SampType:	MSD	TestCod	de: SVOC_S	OIL- Units: mg/l	Kg-dry	Prep Dat	e: 12/7/2 0	004	Run ID: SV	OC-2_04120)7B
Client ID: WSS-SB58-002	Batch ID:	12127	TestN	lo: SW8270C	:		Analysis Da	te: 12/8/2 0	004	SeqNo: 319	9428	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qua
4-Chloro-3-methylphenol		4.443	0.40	4.078	0	109	62	100	3.858	14.1	33	S
2-Chlorophenol		3.754	0.40	4.078	0	92.1	61	91	3.017	21.8	50	S
1,4-Dichlorobenzene		1.769	0.40	2.04	0	86.7	55	90	1.417	22.1	27	
2,4-Dinitrotoluene		1.733	0.21	2.04	0	85	55	101	1.416	20.1	47	
4-Nitrophenol		2.941	2.0	4.078	0	72.1	53	123	2.618	11.6	50	
N-Nitrosodi-n-propylamine		2.651	0.21	2.04	0	130	55	100	2.165	20.2	38	S

0

0

106

106

4.078

2.04

0.40

0.40

4.341

2.154

21.8

20.9

S

35

23

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

Work Order: 0412059

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12147

Sample ID MB-12147-PNA	SampType: MBLK		de: PNA_SOII			•	e: 12/8/2 0		Run ID: SV		A80
Client ID: ZZZZZ	Batch ID: 12147	TestN	lo: SW8270C	-SI		Analysis Dat	e: 12/8/2 0	004	SeqNo: 320	0155	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.025									
Acenaphthylene	ND	0.025									
Anthracene	ND	0.025									
Benz(a)anthracene	ND	0.025									
Benzo(a)pyrene	ND	0.025									
Benzo(b)fluoranthene	ND	0.025									
Benzo(g,h,i)perylene	ND	0.025									
Benzo(k)fluoranthene	ND	0.025									
Chrysene	ND	0.025									
Dibenz(a,h)anthracene	ND	0.025									
Fluoranthene	ND	0.025									
Fluorene	ND	0.025									
Indeno(1,2,3-cd)pyrene	ND	0.025									
Naphthalene	ND	0.025									
Phenanthrene	ND	0.025									
Pyrene	ND	0.025									
Sample ID LCS-12147-PNA	SampType: LCS	TestCod	de: PNA_SOII	L Units: mg/Kg		Prep Date	e: 12/8/2 0	004	Run ID: SV	OC-4_0412	08A
Client ID: ZZZZZ	Batch ID: 12147	TestN	lo: SW8270C	-SI		Analysis Dat	e: 12/8/2 0	004	SeqNo: 320	0156	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.1113	0.025	0.167	0	66.7	30	130	0	0		
Acenaphthylene	0.114	0.025	0.167	0	68.3	30	130	0	0		
Anthracene	0.1167	0.025	0.167	0	69.9	30	130	0	0		
Benz(a)anthracene	0.1117	0.025	0.167	0	66.9	30	130	0	0		
Benzo(a)pyrene	0.1223	0.025	0.167	0	73.3	30	130	0	0		
Benzo(b)fluoranthene	0.1173	0.025	0.167	0	70.3	30	130	0	0		
Benzo(g,h,i)perylene	0.1143	0.025	0.167	0	68.5	30	130	0	0		
· · · · · · · · · · · · · · · · · · ·	0.1313	0.025	0.167	0	78.6	30	130	0	0		
Benzo(k)fluoranthene											
Chrysene	0.1273	0.025	0.167	0	76.2	30	130	0	0		

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

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R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order:

0412059

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12147

Sample ID LCS-12	2147-PNA	SampType:	LCS	TestCode	e: PNA_SOII	Units: mg/Kg		Prep Date	: 12/8/20	004	Run ID: SV	OC-4_04120	A80
Client ID: ZZZZZ		Batch ID:	12147	TestNo	: SW8270C	-SI		Analysis Date	e: 12/8/2 0	004	SeqNo: 320	0156	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoranthene			0.1217	0.025	0.167	0	72.9	30	130	0	0		
Fluorene			0.1163	0.025	0.167	0	69.7	30	130	0	0		
Indeno(1,2,3-cd)pyr	rene		0.1203	0.025	0.167	0	72.1	30	130	0	0		
Naphthalene			0.1017	0.025	0.167	0	60.9	30	130	0	0		
Phenanthrene			0.108	0.025	0.167	0	64.7	30	130	0	0		
Pyrene			0.1143	0.025	0.167	0	68.5	30	130	0	0		
Sample ID 041153	8-005BMS	SampType:	MS	TestCode	: PNA_SOII	_ Units: mg/Kg	j-dry	Prep Date	: 12/8/20	004	Run ID: SV	OC-4_0412	10B
Client ID: ZZZZZ		Batch ID:	12147	TestNo	: SW8270C	-SI		Analysis Date	e: 12/10/ 2	2004	SeqNo: 32	1435	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene			0.4713	0.079	0.5259	0.02301	85.2	30	130	0	0		
Acenaphthylene			0.4146	0.079	0.5259	0.0119	76.6	30	130	0	0		
Anthracene			0.5427	0.079	0.5259	0.08015	88	30	130	0	0		
Benz(a)anthracene)		0.5143	0.079	0.5259	0.1238	74.3	30	130	0	0		
Benzo(a)pyrene			0.5742	0.079	0.5259	0.1246	85.5	30	130	0	0		
Benzo(b)fluoranthe	ene		0.5269	0.079	0.5259	0.08968	83.1	30	130	0	0		
Benzo(g,h,i)perylen	ne		0.5395	0.079	0.5259	0.07222	88.9	30	130	0	0		
Benzo(k)fluoranthe	ne		0.5574	0.079	0.5259	0.1214	82.9	30	130	0	0		
Chrysene			0.5993	0.079	0.5259	0.1492	85.6	30	130	0	0		
Dibenz(a,h)anthrac	ene		0.5521	0.079	0.5259	0.02698	99.9	30	130	0	0		
Fluoranthene			0.6014	0.079	0.5259	0.3095	55.5	30	130	0	0		
Fluorene			0.486	0.079	0.5259	0.03174	86.4	30	130	0	0		
Indeno(1,2,3-cd)pyr	rene		0.549	0.079	0.5259	0.06111	92.8	30	130	0	0		
Naphthalene			0.4167	0.079	0.5259	0.01428	76.5	30	130	0	0		
Phenanthrene			0.5311	0.079	0.5259	0.2301	57.2	30	130	0	0		
Pyrene			0.5742	0.079	0.5259	0.2674	58.3	30	130	0	0		

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order: 0412059

ANALYTICAL QC SUMMARY REPORT

Project: 32088, Willow Street Station- General Iron

BatchID: 12147

Sample ID 0411538-005BMSD	SampType: MSD	TestCoo	de: PNA_SOI	L Units: mg/	Kg-dry	Prep Dat	te: 12/8/2 0	004	Run ID: SV	OC-4_04121	0B
Client ID: ZZZZZ	Batch ID: 12147	TestN	lo: SW8270C	-SI		Analysis Da	te: 12/10/2	2004	SeqNo: 32	1436	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.6607	0.11	0.7042	0.02301	90.5	30	130	0.4713	33.5	50	
Acenaphthylene	0.596	0.11	0.7042	0.0119	82.9	30	130	0.4146	35.9	50	
Anthracene	0.7506	0.11	0.7042	0.08015	95.2	30	130	0.5427	32.2	50	
Benz(a)anthracene	0.7295	0.11	0.7042	0.1238	86	30	130	0.5143	34.6	50	
Benzo(a)pyrene	0.8111	0.11	0.7042	0.1246	97.5	30	130	0.5742	34.2	50	
Benzo(b)fluoranthene	0.7422	0.11	0.7042	0.08968	92.7	30	130	0.5269	33.9	50	
Benzo(g,h,i)perylene	0.7787	0.11	0.7042	0.07222	100	30	130	0.5395	36.3	50	
Benzo(k)fluoranthene	0.8827	0.11	0.7042	0.1214	108	30	130	0.5574	45.2	50	
Chrysene	0.835	0.11	0.7042	0.1492	97.4	30	130	0.5993	32.9	50	
Dibenz(a,h)anthracene	0.8083	0.11	0.7042	0.02698	111	30	130	0.5521	37.7	50	
Fluoranthene	0.7872	0.11	0.7042	0.3095	67.8	30	130	0.6014	26.7	50	
Fluorene	0.6902	0.11	0.7042	0.03174	93.5	30	130	0.486	34.7	50	
Indeno(1,2,3-cd)pyrene	0.7984	0.11	0.7042	0.06111	105	30	130	0.549	37.0	50	
Naphthalene	0.589	0.11	0.7042	0.01428	81.6	30	130	0.4167	34.3	50	
Phenanthrene	0.6761	0.11	0.7042	0.2301	63.3	30	130	0.5311	24.0	50	
Pyrene	0.752	0.11	0.7042	0.2674	68.8	30	130	0.5742	26.8	50	

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R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

Work Order:

Project:

0412059

32088, Willow Street Station-General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12076

Sample ID 0412059-007AMS	SampType: MS	TestCo	de: VOC_ENC	OR Units: mg/l	Kg-dry	Prep Dat	te: 12/3/2 0	004	Run ID: VC	A-2_041208	BA
Client ID: WSS-SB58-001	Batch ID: 12076 TestNo: SW5035/8260						te: 12/8/2	004	SeqNo: 319605		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.09293	0.010	0.1034	0	89.8	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.06	0.010	0.1034	0	58	70	130	0	0		S
1,1,2-Trichloroethane	0.0812	0.010	0.1034	0	78.5	70	130	0	0		
1,1-Dichloroethane	0.0895	0.010	0.1034	0	86.5	70	130	0	0		
1,1-Dichloroethene	0.08104	0.010	0.1034	0	78.3	50	234	0	0		
1,2-Dichloroethane	0.07566	0.010	0.1034	0	73.1	70	130	0	0		
1,2-Dichloropropane	0.08242	0.010	0.1034	0	79.7	70	130	0	0		
2-Butanone	0.07562	0.021	0.1034	0	73.1	70	130	0	0		
2-Hexanone	0.08263	0.021	0.1034	0	79.9	70	130	0	0		
4-Methyl-2-pentanone	0.08269	0.021	0.1034	0	79.9	70	130	0	0		
Acetone	0.2049	0.052	0.1034	0.0299	169	70	130	0	0		S
Benzene	0.08886	0.010	0.1034	0.003606	82.4	37	151	0	0		
Bromodichloromethane	0.05501	0.010	0.1034	0	53.2	70	130	0	0		S
Bromoform	0.04115	0.010	0.1034	0	39.8	70	130	0	0		S
Bromomethane	0.05458	0.021	0.1034	0	52.8	70	130	0	0		S
Carbon disulfide	0.08503	0.010	0.1034	0.00462	77.7	70	130	0	0		
Carbon tetrachloride	0.06717	0.010	0.1034	0	64.9	70	130	0	0		S
Chlorobenzene	0.0745	0.010	0.1034	0	72	37	160	0	0		
Chloroethane	0.08799	0.021	0.1034	0	85.1	70	130	0	0		
Chloroform	0.0855	0.010	0.1034	0	82.7	70	130	0	0		
Chloromethane	0.06897	0.021	0.1034	0	66.7	70	130	0	0		S
cis-1,2-Dichloroethene	0.07402	0.010	0.1034	0	71.6	70	130	0	0		
cis-1,3-Dichloropropene	0.04535	0.010	0.1034	0	43.8	70	130	0	0		S
Dibromochloromethane	0.0564	0.010	0.1034	0	54.5	70	130	0	0		S
Ethylbenzene	0.08441	0.010	0.1034	0.001503	80.1	70	130	0	0		
Methyl tert-butyl ether	0.0993	0.010	0.1034	0	96	50	150	0	0		
Methylene chloride	0.08054	0.021	0.1034	0	77.9	70	130	0	0		
Styrene	0.06482	0.010	0.1034	0	62.7	70	130	0	0		S
Tetrachloroethene	0.09072	0.010	0.1034	0	87.7	70	130	0	0		
Toluene	0.07849	0.010	0.1034	0.001446	74.5	47	150	0	0		
trans-1,2-Dichloroethene	0.07214	0.010	0.1034	0	69.7	70	130	0	0		S

Qualifiers:

H/HT - Holding Time Exceeded

ND - Not Detected at the Reporting Limit

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B - Analyte detected in the associated Method Blanl

Work Order: 0412059

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12076

Sample ID 0412059-007AMS	SampType: MS	TestCo	de: VOC_ENC	OR Units: mg/l	Kg-dry	Prep Dat	e: 12/3/2 0	004	Run ID: VO	A-2_041208	ВА
Client ID: WSS-SB58-001	Batch ID: 12076	TestNo: SW5035/8260				Analysis Da	te: 12/8/2 0	004	SeqNo: 319605		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	0.05391	0.010	0.1034	0	52.1	70	130	0	0		S
Trichloroethene	0.07408	0.010	0.1034	0	71.6	71	157	0	0		
Vinyl chloride	0.0836	0.010	0.1034	0	80.8	70	130	0	0		
Xylenes, Total	0.2641	0.021	0.3103	0.01151	81.4	70	130	0	0		
Sample ID 0412059-008AMS	SampType: MS TestCode: VOC_ENCOR			OR Units: mg/l	Kg-dry	Prep Date: 12/3/2004			Run ID: VOA-2_041208A		
Client ID: WSS-SB58-002	Batch ID: 12076	TestNo: SW5035/8260				Analysis Da	te: 12/8/2 0	004	SeqNo: 319681		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.04867	0.0061	0.06056	0	80.4	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.02719	0.0061	0.06056	0	44.9	70	130	0	0		S
1,1,2-Trichloroethane	0.03316	0.0061	0.06056	0	54.8	70	130	0	0		S
1,1-Dichloroethane	0.04329	0.0061	0.06056	0	71.5	70	130	0	0		
1,1-Dichloroethene	0.04896	0.0061	0.06056	0	80.8	50	234	0	0		
1,2-Dichloroethane	0.03527	0.0061	0.06056	0	58.2	70	130	0	0		S
1,2-Dichloropropane	0.03451	0.0061	0.06056	0	57	70	130	0	0		S
2-Butanone	0.04462	0.012	0.06056	0	73.7	70	130	0	0		
2-Hexanone	0.03459	0.012	0.06056	0	57.1	70	130	0	0		S
4-Methyl-2-pentanone	0.0383	0.012	0.06056	0	63.2	70	130	0	0		S
Acetone	0.07465	0.030	0.06056	0.01947	91.1	70	130	0	0		
Benzene	0.03902	0.0061	0.06056	0	64.4	37	151	0	0		
Bromodichloromethane	0.02123	0.0061	0.06056	0	35.1	70	130	0	0		S
Bromoform	0.01428	0.0061	0.06056	0	23.6	70	130	0	0		S
Bromomethane	0.03488	0.012	0.06056	0	57.6	70	130	0	0		S
Carbon disulfide	0.0596	0.0061	0.06056	0.001235	96.4	70	130	0	0		
Carbon tetrachloride	0.0397	0.0061	0.06056	0	65.6	70	130	0	0		S
Chlorobenzene	0.02844	0.0061	0.06056	0	47	37	160	0	0		
Chloroethane	0.05456	0.012	0.06056	0	90.1	70	130	0	0		
Chloroform	0.04084	0.0061	0.06056	0	67.4	70	130	0	0		S
Chloromethane	0.04664	0.012	0.06056	0	77	70	130	0	0		
cis-1,2-Dichloroethene	0.04117	0.0061	0.06056	0	68	70	130	0	0		S

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order:

Project:

0412059

32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12076

Sample ID 0412059-008AMS	SampType: MS	TestCode: VOC_ENCOR Units: mg/Kg-dry				Prep Dat	te: 12/3/2 0	004	Run ID: VOA-2_041208A			
Client ID: WSS-SB58-002	Batch ID: 12076	TestNo: SW5035/8260				Analysis Da	te: 12/8/2 0	004	SeqNo: 319681			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
cis-1,3-Dichloropropene	0.02015	0.0061	0.06056	0	33.3	70	130	0	0		S	
Dibromochloromethane	0.02021	0.0061	0.06056	0	33.4	70	130	0	0		S	
Ethylbenzene	0.03871	0.0061	0.06056	0.001113	62.1	70	130	0	0		S	
Methyl tert-butyl ether	0.05736	0.0061	0.06056	0	94.7	50	150	0	0			
Methylene chloride	0.0483	0.012	0.06056	0	79.8	70	130	0	0			
Styrene	0.02237	0.0061	0.06056	0	36.9	70	130	0	0		S	
Tetrachloroethene	0.04862	0.0061	0.06056	0	80.3	70	130	0	0			
Toluene	0.0356	0.0061	0.06056	0.003729	52.6	47	150	0	0			
trans-1,2-Dichloroethene	0.04546	0.0061	0.06056	0	75.1	70	130	0	0			
trans-1,3-Dichloropropene	0.02415	0.0061	0.06056	0	39.9	70	130	0	0		S	
Trichloroethene	0.03567	0.0061	0.06056	0	58.9	71	157	0	0		S	
Vinyl chloride	0.05823	0.0061	0.06056	0	96.2	70	130	0	0			
Xylenes, Total	0.1164	0.012	0.1817	0.002727	62.6	70	130	0	0		S	

Sample ID 0412059-007AMSD	SampType: MSD	3. 3 m ,			Kg-dry	Prep Date	e: 12/3/2 0	004	Run ID: VOA-2_041208A			
Client ID: WSS-SB58-001	Batch ID: 12076				Analysis Dat	te: 12/8/2 0	004	SeqNo: 319668				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1,1-Trichloroethane	0.0757	0.0089	0.08915	0	84.9	70	130	0.09293	20.4	25		
1,1,2,2-Tetrachloroethane	0.05302	0.0089	0.08915	0	59.5	70	130	0.06	12.3	25	S	
1,1,2-Trichloroethane	0.0739	0.0089	0.08915	0	82.9	70	130	0.0812	9.41	25		
1,1-Dichloroethane	0.07599	0.0089	0.08915	0	85.2	70	130	0.0895	16.3	25		
1,1-Dichloroethene	0.07317	0.0089	0.08915	0	82.1	50	234	0.08104	10.2	25		
1,2-Dichloroethane	0.06363	0.0089	0.08915	0	71.4	70	130	0.07566	17.3	25		
1,2-Dichloropropane	0.0682	0.0089	0.08915	0	76.5	70	130	0.08242	18.9	25		
2-Butanone	0.05456	0.018	0.08915	0	61.2	70	130	0.07562	32.4	25	SR	
2-Hexanone	0.07576	0.018	0.08915	0	85	70	130	0.08263	8.68	25		
4-Methyl-2-pentanone	0.07125	0.018	0.08915	0	79.9	70	130	0.08269	14.9	25		
Acetone	0.142	0.045	0.08915	0.0299	126	70	130	0.2049	36.3	25	R	
Benzene	0.07296	0.0089	0.08915	0.003606	77.8	37	151	0.08886	19.7	25		
Bromodichloromethane	0.04037	0.0089	0.08915	0	45.3	70	130	0.05501	30.7	25	SR	

ND - Not Detected at the Reporting Limit

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R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order: 0412059

Project:

32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12076

Sample ID 0412059-007AMSD	SampType: MSD	TestCo	de: VOC_ENC	OR Units: mg	/Kg-dry	Prep Da	te: 12/3/2 0	004	Run ID: VC	A-2_041208	BA
Client ID: WSS-SB58-001	Batch ID: 12076	TestN	lo: SW5035/8	260		Analysis Da	te: 12/8/2	004	SeqNo: 31	9668	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.02963	0.0089	0.08915	0	33.2	70	130	0.04115	32.5	25	SR
Bromomethane	0.04837	0.018	0.08915	0	54.3	70	130	0.05458	12.1	25	S
Carbon disulfide	0.07463	0.0089	0.08915	0.00462	78.5	70	130	0.08503	13.0	25	
Carbon tetrachloride	0.05454	0.0089	0.08915	0	61.2	70	130	0.06717	20.8	25	S
Chlorobenzene	0.06502	0.0089	0.08915	0	72.9	37	160	0.0745	13.6	25	
Chloroethane	0.07865	0.018	0.08915	0	88.2	70	130	0.08799	11.2	25	
Chloroform	0.07374	0.0089	0.08915	0	82.7	70	130	0.0855	14.8	25	
Chloromethane	0.05784	0.018	0.08915	0	64.9	70	130	0.06897	17.6	25	S
cis-1,2-Dichloroethene	0.06497	0.0089	0.08915	0	72.9	70	130	0.07402	13.0	25	
cis-1,3-Dichloropropene	0.04094	0.0089	0.08915	0	45.9	70	130	0.04535	10.2	25	S
Dibromochloromethane	0.04185	0.0089	0.08915	0	46.9	70	130	0.0564	29.6	25	SR
Ethylbenzene	0.07258	0.0089	0.08915	0.001503	79.7	70	130	0.08441	15.1	25	
Methyl tert-butyl ether	0.08241	0.0089	0.08915	0	92.4	50	150	0.0993	18.6	0	
Methylene chloride	0.06611	0.018	0.08915	0	74.2	70	130	0.08054	19.7	25	
Styrene	0.05672	0.0089	0.08915	0	63.6	70	130	0.06482	13.3	25	S
Tetrachloroethene	0.0772	0.0089	0.08915	0	86.6	70	130	0.09072	16.1	25	
Toluene	0.06709	0.0089	0.08915	0.001446	73.6	47	150	0.07849	15.7	25	
trans-1,2-Dichloroethene	0.06419	0.0089	0.08915	0	72	70	130	0.07214	11.7	25	
trans-1,3-Dichloropropene	0.04546	0.0089	0.08915	0	51	70	130	0.05391	17.0	25	S
Trichloroethene	0.06422	0.0089	0.08915	0	72	71	157	0.07408	14.3	25	
Vinyl chloride	0.07353	0.0089	0.08915	0	82.5	70	130	0.0836	12.8	25	
Xylenes, Total	0.2279	0.018	0.2674	0.01151	80.9	70	130	0.2641	14.7	25	
Sample ID 0412059-008AMSD	SampType: MSD	TestCo	de: VOC_ENC	OR Units: mg	/Kg-dry	Prep Da	te: 12/3/2	004	Run ID: VC	A-2_041208	BA
Client ID: WSS-SB58-002	Batch ID: 12076	TestN	lo: SW5035/8	260		Analysis Da	te: 12/8/2 0	004	SeqNo: 31	9913	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.04225	0.0059	0.05871	0	72	70	130	0.04867	14.1	25	
1,1,2,2-Tetrachloroethane	0.0168	0.0059	0.05871	0	28.6	70	130	0.02719	47.2	25	SR
1,1,2-Trichloroethane	0.02351	0.0059	0.05871	0	40	70	130	0.03316	34.1	25	SR
1,1-Dichloroethane	0.03455	0.0059	0.05871	0	58.8	70	130	0.04329	22.5	25	S
,	0.00.00	2.3000	2.500.1	•	00.0	. 0		2.0.020	0	_0	-

ND - Not Detected at the Reporting Limit

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^{* -} Non Accredited Parameter

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R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order: 0412059

Project:

32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12076

Sample ID 0412059-008AMSD	SampType: MSD	TestCo	de: VOC_ENC	OR Units: mg/l	(g-dry	Prep Dat	te: 12/3/2 0	004	Run ID: VO	A-2_041208	BA
Client ID: WSS-SB58-002	Batch ID: 12076	TestN	No: SW5035/8	260		Analysis Da	te: 12/8/2 0	004	SeqNo: 319	9913	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.04448	0.0059	0.05871	0	75.8	50	234	0.04896	9.58	25	
1,2-Dichloroethane	0.02553	0.0059	0.05871	0	43.5	70	130	0.03527	32.0	25	SR
1,2-Dichloropropane	0.02533	0.0059	0.05871	0	43.1	70	130	0.03451	30.7	25	SR
2-Butanone	0.04212	0.012	0.05871	0	71.7	70	130	0.04462	5.77	25	
2-Hexanone	0.02553	0.012	0.05871	0	43.5	70	130	0.03459	30.2	25	SR
4-Methyl-2-pentanone	0.02931	0.012	0.05871	0	49.9	70	130	0.0383	26.6	25	SR
Acetone	0.0776	0.029	0.05871	0.01947	99	70	130	0.07465	3.89	25	
Benzene	0.02965	0.0059	0.05871	0	50.5	37	151	0.03902	27.3	25	R
Bromodichloromethane	0.01209	0.0059	0.05871	0	20.6	70	130	0.02123	54.8	25	SR
Bromoform	0.006458	0.0059	0.05871	0	11	70	130	0.01428	75.4	25	SR
Bromomethane	0.02878	0.012	0.05871	0	49	70	130	0.03488	19.2	25	S
Carbon disulfide	0.05171	0.0059	0.05871	0.001235	86	70	130	0.0596	14.2	25	
Carbon tetrachloride	0.03437	0.0059	0.05871	0	58.5	70	130	0.0397	14.4	25	S
Chlorobenzene	0.02205	0.0059	0.05871	0	37.6	37	160	0.02844	25.3	25	R
Chloroethane	0.04871	0.012	0.05871	0	83	70	130	0.05456	11.3	25	
Chloroform	0.02965	0.0059	0.05871	0	50.5	70	130	0.04084	31.8	25	SR
Chloromethane	0.04623	0.012	0.05871	0	78.7	70	130	0.04664	0.891	25	
cis-1,2-Dichloroethene	0.03176	0.0059	0.05871	0	54.1	70	130	0.04117	25.8	25	SR
cis-1,3-Dichloropropene	0.01158	0.0059	0.05871	0	19.7	70	130	0.02015	54.1	25	SR
Dibromochloromethane	0.01073	0.0059	0.05871	0	18.3	70	130	0.02021	61.3	25	SR
Ethylbenzene	0.03525	0.0059	0.05871	0.001113	58.1	70	130	0.03871	9.36	25	S
Methyl tert-butyl ether	0.05656	0.0059	0.05871	0	96.3	50	150	0.05736	1.40	0	
Methylene chloride	0.04286	0.012	0.05871	0	73	70	130	0.0483	11.9	25	
Styrene	0.01711	0.0059	0.05871	0	29.1	70	130	0.02237	26.7	25	SR
Tetrachloroethene	0.04495	0.0059	0.05871	0	76.6	70	130	0.04862	7.84	25	
Toluene	0.02835	0.0059	0.05871	0.003729	41.9	47	150	0.0356	22.7	25	S
rans-1,2-Dichloroethene	0.03799	0.0059	0.05871	0	64.7	70	130	0.04546	17.9	25	S
trans-1,3-Dichloropropene	0.01296	0.0059	0.05871	0	22.1	70	130	0.02415	60.3	25	SR
Trichloroethene	0.02737	0.0059	0.05871	0	46.6	71	157	0.03567	26.3	25	SR
Vinyl chloride	0.05566	0.0059	0.05871	0	94.8	70	130	0.05823	4.52	25	
Xylenes, Total	0.1041	0.012	0.1761	0.002727	57.6	70	130	0.1164	11.2	25	S

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order: 0412059

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12105

Sample ID 0412059-007AMS	SampType: MS			OR Units: mg/l	•	Prep Dat				0A-2_041208	3B
Client ID: WSS-SB58-001	Batch ID: 12105	restr	lo: SW5035/8	200		Analysis Da	te: 12/9/20	JU4	SeqNo: 32	0114	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.1139	0.012	0.1191	0	95.7	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.06805	0.012	0.1191	0	57.2	70	130	0	0		S
1,1,2-Trichloroethane	0.1022	0.012	0.1191	0	85.8	70	130	0	0		
1,1-Dichloroethane	0.1111	0.012	0.1191	0	93.3	70	130	0	0		
1,1-Dichloroethene	0.1068	0.012	0.1191	0	89.7	50	234	0	0		
1,2-Dichloroethane	0.0936	0.012	0.1191	0	78.6	70	130	0	0		
1,2-Dichloropropane	0.09865	0.012	0.1191	0	82.9	70	130	0	0		
2-Butanone	0.0912	0.024	0.1191	0	76.6	70	130	0	0		
2-Hexanone	0.09518	0.024	0.1191	0	79.9	70	130	0	0		
4-Methyl-2-pentanone	0.09303	0.024	0.1191	0	78.1	70	130	0	0		
Acetone	0.2836	0.060	0.1191	0.0299	213	70	130	0	0		S
Benzene	0.1053	0.012	0.1191	0.003606	85.4	37	151	0	0		
Bromodichloromethane	0.07474	0.012	0.1191	0	62.8	70	130	0	0		S
Bromoform	0.05958	0.012	0.1191	0	50	70	130	0	0		S
Bromomethane	0.07482	0.024	0.1191	0	62.8	70	130	0	0		S
Carbon disulfide	0.109	0.012	0.1191	0.00462	87.7	70	130	0	0		
Carbon tetrachloride	0.09756	0.012	0.1191	0	81.9	70	130	0	0		
Chlorobenzene	0.09146	0.012	0.1191	0	76.8	37	160	0	0		
Chloroethane	0.115	0.024	0.1191	0	96.6	70	130	0	0		
Chloroform	0.1072	0.012	0.1191	0	90.1	70	130	0	0		
Chloromethane	0.08641	0.024	0.1191	0	72.6	70	130	0	0		
cis-1,2-Dichloroethene	0.09294	0.012	0.1191	0	78.1	70	130	0	0		
cis-1,3-Dichloropropene	0.05881	0.012	0.1191	0	49.4	70	130	0	0		S
Dibromochloromethane	0.07948	0.012	0.1191	0	66.8	70	130	0	0		S
Ethylbenzene	0.1045	0.012	0.1191	0.001503	86.5	70	130	0	0		
Methyl tert-butyl ether	0.1197	0.012	0.1191	0	101	50	150	0	0		
Methylene chloride	0.09437	0.024	0.1191	0	79.3	70	130	0	0		
Styrene	0.07575	0.012	0.1191	0	63.6	70	130	0	0		S
Tetrachloroethene	0.1136	0.012	0.1191	0	95.4	70	130	0	0		
Toluene	0.09606	0.012	0.1191	0.001446	79.5	47	150	0	0		
trans-1,2-Dichloroethene	0.09394	0.012	0.1191	0	78.9	70	130	0	0		

ND - Not Detected at the Reporting Limit

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R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order: 0412059

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12105

Sample ID 0412059-007AMS	SampType: MS	TestCo	de: VOC_ENC	OR Units: mg/	Kg-dry	Prep Date	e: 12/3/20	004	Run ID: VO	A-2_04120	8B
Client ID: WSS-SB58-001	Batch ID: 12105	TestN	No: SW5035/8	3260		Analysis Dat	e: 12/9/2 0	004	SeqNo: 320	0114	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	0.0692	0.012	0.1191	0	58.1	70	130	0	0		S
Trichloroethene	0.09213	0.012	0.1191	0	77.4	71	157	0	0		
Vinyl chloride	0.1074	0.012	0.1191	0	90.2	70	130	0	0		
Xylenes, Total	0.3171	0.024	0.3572	0.01151	85.6	70	130	0	0		
Sample ID 0412059-008AMS	SampType: MS	TestCo	de: VOC_ENC	OR Units: mg/	Kg-dry	Prep Date	e: 12/3/2 0	004	Run ID: VO	A-2_04120	8B
Client ID: WSS-SB58-002	Batch ID: 12105	TestN	lo: SW5035/8	3260		Analysis Dat	e: 12/9/2 0	004	SeqNo: 320	0118	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.04885	0.0060	0.05987	0	81.6	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.0265	0.0060	0.05987	0	44.3	70	130	0	0		S
1,1,2-Trichloroethane	0.03336	0.0060	0.05987	0	55.7	70	130	0	0		S
1,1-Dichloroethane	0.04198	0.0060	0.05987	0	70.1	70	130	0	0		
1,1-Dichloroethene	0.04539	0.0060	0.05987	0	75.8	50	234	0	0		
1,2-Dichloroethane	0.03387	0.0060	0.05987	0	56.6	70	130	0	0		S
1,2-Dichloropropane	0.03267	0.0060	0.05987	0	54.6	70	130	0	0		S
2-Butanone	0.04464	0.012	0.05987	0	74.6	70	130	0	0		
2-Hexanone	0.03301	0.012	0.05987	0	55.1	70	130	0	0		S
4-Methyl-2-pentanone	0.03599	0.012	0.05987	0	60.1	70	130	0	0		S
Acetone	0.07714	0.030	0.05987	0.01254	108	70	130	0	0		
Benzene	0.03734	0.0060	0.05987	0	62.4	37	151	0	0		
Bromodichloromethane	0.0208	0.0060	0.05987	0	34.7	70	130	0	0		S
Bromoform	0.01543	0.0060	0.05987	0	25.8	70	130	0	0		S
Bromomethane	0.03663	0.012	0.05987	0	61.2	70	130	0	0		S
Carbon disulfide	0.05982	0.0060	0.05987	0.0008626	98.5	70	130	0	0		
Carbon tetrachloride	0.04049	0.0060	0.05987	0	67.6	70	130	0	0		S
Chlorobenzene	0.02652	0.0060	0.05987	0	44.3	37	160	0	0		
Chloroethane	0.04971	0.012	0.05987	0	83	70	130	0	0		
Chloroform	0.04086	0.0060	0.05987	0	68.3	70	130	0	0		S
Chloromethane	0.04592	0.012	0.05987	0	76.7	70	130	0	0		
cis-1,2-Dichloroethene	0.03876	0.0060	0.05987	0	64.7	70	130	0	0		S

ND - Not Detected at the Reporting Limit

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^{* -} Non Accredited Parameter

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R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order:

0412059

Project: 32088, Willow Street Station-General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12105

Sample ID 0412059-008AMS	SampType: MS	TestCo	de: VOC_ENC	OR Units: mg/l	(g-dry	Prep Dat	te: 12/3/2 0	004	Run ID: VC	A-2_041208	ВВ
Client ID: WSS-SB58-002	Batch ID: 12105	TestN	No: SW5035/8	3260		Analysis Da	te: 12/9/2 0	004	SeqNo: 32	0118	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	0.02146	0.0060	0.05987	0	35.8	70	130	0	0		S
Dibromochloromethane	0.02158	0.0060	0.05987	0	36	70	130	0	0		S
Ethylbenzene	0.03603	0.0060	0.05987	0.001227	58.1	70	130	0	0		S
Methyl tert-butyl ether	0.05601	0.0060	0.05987	0	93.6	50	150	0	0		
Methylene chloride	0.04683	0.012	0.05987	0.001555	75.6	70	130	0	0		
Styrene	0.0213	0.0060	0.05987	0	35.6	70	130	0	0		S
Tetrachloroethene	0.04665	0.0060	0.05987	0	77.9	70	130	0	0		
Toluene	0.03339	0.0060	0.05987	0.002916	50.9	47	150	0	0		
trans-1,2-Dichloroethene	0.04502	0.0060	0.05987	0	75.2	70	130	0	0		
trans-1,3-Dichloropropene	0.02362	0.0060	0.05987	0	39.5	70	130	0	0		S
Trichloroethene	0.03397	0.0060	0.05987	0	56.7	71	157	0	0		S
Vinyl chloride	0.05528	0.0060	0.05987	0	92.3	70	130	0	0		
Xylenes, Total	0.1103	0.012	0.1796	0.005601	58.3	70	130	0	0		S

Sample ID 0412059-007AMSD	SampType: MSD	TestCod	de: VOC_ENC	OR Units: mg/l	Kg-dry	Prep Date	e: 12/3/2 0	004	Run ID: VO	A-2_041208	В
Client ID: WSS-SB58-001	Batch ID: 12105	TestN	lo: SW5035/8	260		Analysis Dat	e: 12/9/2 0	004	SeqNo: 32	0115	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.1064	0.011	0.1102	0	96.6	70	130	0.09293	13.6	25	
1,1,2,2-Tetrachloroethane	0.06033	0.011	0.1102	0	54.8	70	130	0.06	0.556	25	S
1,1,2-Trichloroethane	0.08884	0.011	0.1102	0	80.6	70	130	0.0812	8.99	25	
1,1-Dichloroethane	0.1008	0.011	0.1102	0	91.5	70	130	0.0895	11.9	25	
1,1-Dichloroethene	0.1007	0.011	0.1102	0	91.4	50	234	0.08104	21.6	25	
1,2-Dichloroethane	0.08587	0.011	0.1102	0	77.9	70	130	0.07566	12.6	25	
1,2-Dichloropropane	0.09252	0.011	0.1102	0	84	70	130	0.08242	11.5	25	
2-Butanone	0.07888	0.022	0.1102	0	71.6	70	130	0.07562	4.23	25	
2-Hexanone	0.09301	0.022	0.1102	0	84.4	70	130	0.08263	11.8	25	
4-Methyl-2-pentanone	0.0918	0.022	0.1102	0	83.3	70	130	0.08269	10.4	25	
Acetone	0.2253	0.055	0.1102	0.0299	177	70	130	0.2049	9.46	25	S
Benzene	0.1002	0.011	0.1102	0.003606	87.7	37	151	0.08886	12.0	25	
Bromodichloromethane	0.06249	0.011	0.1102	0	56.7	70	130	0.05501	12.7	25	S

Qualifiers:

H/HT - Holding Time Exceeded

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^{* -} Non Accredited Parameter

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R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blanl

Work Order: 0412059

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12105

Sample ID 0412059-007AMSD	SampType: MSD	TestCo	de: VOC_ENC	OR Units: mg/	Kg-dry	Prep Date	e: 12/3/2 0	004	Run ID: VO	A-2_041208	BB
Client ID: WSS-SB58-001	Batch ID: 12105	TestN	lo: SW5035/8	260		Analysis Dat	e: 12/9/2	004	SeqNo: 320	0115	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.04685	0.011	0.1102	0	42.5	70	130	0.04115	12.9	25	S
Bromomethane	0.06765	0.022	0.1102	0	61.4	70	130	0.05458	21.4	25	S
Carbon disulfide	0.1049	0.011	0.1102	0.00462	91	70	130	0.08503	20.9	25	
Carbon tetrachloride	0.08752	0.011	0.1102	0	79.4	70	130	0.06717	26.3	25	R
Chlorobenzene	0.07862	0.011	0.1102	0	71.4	37	160	0.0745	5.38	25	
Chloroethane	0.1009	0.022	0.1102	0	91.6	70	130	0.08799	13.7	25	
Chloroform	0.09946	0.011	0.1102	0	90.3	70	130	0.0855	15.1	25	
Chloromethane	0.07921	0.022	0.1102	0	71.9	70	130	0.06897	13.8	25	
cis-1,2-Dichloroethene	0.08353	0.011	0.1102	0	75.8	70	130	0.07402	12.1	25	
cis-1,3-Dichloropropene	0.05584	0.011	0.1102	0	50.7	70	130	0.04535	20.7	25	S
Dibromochloromethane	0.06342	0.011	0.1102	0	57.6	70	130	0.0564	11.7	25	S
Ethylbenzene	0.09446	0.011	0.1102	0.001503	84.4	70	130	0.08441	11.2	25	
Methyl tert-butyl ether	0.1129	0.011	0.1102	0	102	50	150	0.0993	12.8	0	
Methylene chloride	0.09217	0.022	0.1102	0	83.7	70	130	0.08054	13.5	25	
Styrene	0.06538	0.011	0.1102	0	59.3	70	130	0.06482	0.860	25	5
Tetrachloroethene	0.1036	0.011	0.1102	0	94.1	70	130	0.09072	13.3	25	
Toluene	0.08994	0.011	0.1102	0.001446	80.3	47	150	0.07849	13.6	25	
trans-1,2-Dichloroethene	0.08717	0.011	0.1102	0	79.1	70	130	0.07214	18.9	25	
trans-1,3-Dichloropropene	0.05903	0.011	0.1102	0	53.6	70	130	0.05391	9.06	25	5
Trichloroethene	0.08887	0.011	0.1102	0	80.7	71	157	0.07408	18.1	25	
Vinyl chloride	0.1015	0.011	0.1102	0	92.1	70	130	0.0836	19.3	25	
Xylenes, Total	0.2875	0.022	0.3305	0.01151	83.5	70	130	0.2641	8.45	25	
Sample ID 0412059-008AMSD	SampType: MSD	TestCo	de: VOC_ENC	OR Units: mg/	Kg-dry	Prep Date	e: 12/3/2 0	004	Run ID: VO	A-2_041208	ВВ
Client ID: WSS-SB58-002	Batch ID: 12105	TestN	lo: SW5035/8	260		Analysis Dat	e: 12/9/2 0	004	SeqNo: 320	0119	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qu
4.4.4 Triablementhers		0.0050	0.05000	0	86.7	70	130	0.04885	2.99	25	
1,1,1-irichioroethane	0.05033	0.0058	0.05803	U		10	100	0.04000	2.00	20	
, ,	0.05033 0.02617	0.0058	0.05803	0	45.1	70 70	130	0.04665	1.24	25	9
1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane						-					S

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H/HT - Holding Time Exceeded

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Work Order: 0412059

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12105

Sample ID 0412059-008AMSD	SampType: MSD	TestCo	de: VOC_ENC	OR Units: mg/	Kg-dry	Prep Dat	te: 12/3/2 0	004	Run ID: VC	A-2_041208	ВВ
Client ID: WSS-SB58-002	Batch ID: 12105	TestN	lo: SW5035/8	260		Analysis Da	te: 12/9/2	004	SeqNo: 32	0119	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.04865	0.0058	0.05803	0	83.8	50	234	0.04539	6.93	25	
1,2-Dichloroethane	0.03205	0.0058	0.05803	0	55.2	70	130	0.03387	5.52	25	S
1,2-Dichloropropane	0.03155	0.0058	0.05803	0	54.4	70	130	0.03267	3.49	25	S
2-Butanone	0.03873	0.012	0.05803	0	66.7	70	130	0.04464	14.2	25	S
2-Hexanone	0.03158	0.012	0.05803	0	54.4	70	130	0.03301	4.43	25	S
4-Methyl-2-pentanone	0.03449	0.012	0.05803	0	59.4	70	130	0.03599	4.26	25	S
Acetone	0.08128	0.029	0.05803	0.01254	118	70	130	0.07714	5.23	25	
Benzene	0.03737	0.0058	0.05803	0	64.4	37	151	0.03734	0.0663	25	
Bromodichloromethane	0.01929	0.0058	0.05803	0	33.2	70	130	0.0208	7.53	25	S
Bromoform	0.01174	0.0058	0.05803	0	20.2	70	130	0.01543	27.1	25	SR
Bromomethane	0.03266	0.012	0.05803	0	56.3	70	130	0.03663	11.5	25	S
Carbon disulfide	0.0574	0.0058	0.05803	0.0008626	97.4	70	130	0.05982	4.13	25	
Carbon tetrachloride	0.04207	0.0058	0.05803	0	72.5	70	130	0.04049	3.82	25	
Chlorobenzene	0.02915	0.0058	0.05803	0	50.2	37	160	0.02652	9.46	25	
Chloroethane	0.05392	0.012	0.05803	0	92.9	70	130	0.04971	8.12	25	
Chloroform	0.03772	0.0058	0.05803	0	65	70	130	0.04086	8.01	25	S
Chloromethane	0.0478	0.012	0.05803	0	82.4	70	130	0.04592	4.02	25	
cis-1,2-Dichloroethene	0.03565	0.0058	0.05803	0	61.4	70	130	0.03876	8.35	25	S
cis-1,3-Dichloropropene	0.018	0.0058	0.05803	0	31	70	130	0.02146	17.5	25	S
Dibromochloromethane	0.01889	0.0058	0.05803	0	32.6	70	130	0.02158	13.3	25	S
Ethylbenzene	0.04374	0.0058	0.05803	0.001227	73.3	70	130	0.03603	19.3	25	
Methyl tert-butyl ether	0.05752	0.0058	0.05803	0	99.1	50	150	0.05601	2.65	0	
Methylene chloride	0.04676	0.012	0.05803	0.001555	77.9	70	130	0.04683	0.148	25	
Styrene	0.02318	0.0058	0.05803	0	39.9	70	130	0.0213	8.43	25	S
Tetrachloroethene	0.05571	0.0058	0.05803	0	96	70	130	0.04665	17.7	25	
Toluene	0.03407	0.0058	0.05803	0.002916	53.7	47	150	0.03339	2.02	25	
trans-1,2-Dichloroethene	0.04447	0.0058	0.05803	0	76.6	70	130	0.04502	1.22	25	
trans-1,3-Dichloropropene	0.02111	0.0058	0.05803	0	36.4	70	130	0.02362	11.2	25	S
Trichloroethene	0.03299	0.0058	0.05803	0	56.9	71	157	0.03397	2.91	25	S
Vinyl chloride	0.05988	0.0058	0.05803	0	103	70	130	0.05528	7.99	25	
Xylenes, Total	0.1298	0.012	0.1741	0.005601	71.4	70	130	0.1103	16.2	25	

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Work Order: 0412059

Project:

ANALYTICAL QC SUMMARY REPORT

32088, Willow Street Station- General Iron

BatchID: R15577

Sample ID VBLK120804-2	SampType: MBLK	TestCo	de: VOC_ENC	OR Units: mg/Kg		Prep Da	te:		Run ID: VC	OA-2_041208	ВА
Client ID: ZZZZZ	Batch ID: R15577	TestN	lo: SW5035/ 8	3260		Analysis Da	ite: 12/8/2	004	SeqNo: 31	9434	
Analyta	Poordt	PQL	SDK volus	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Ougl
Analyte	Result	PQL	SPK value	SPK Rei vai	%REC	LOWLIIIII	підпіліп	KPD Rei Vai	70KFD	RPDLIMIT	Qual
1,1,1-Trichloroethane	ND	0.0050									
1,1,2,2-Tetrachloroethane	ND	0.0050									
1,1,2-Trichloroethane	ND	0.0050									
1,1-Dichloroethane	ND	0.0050									
1,1-Dichloroethene	ND	0.0050									
1,2-Dichloroethane	ND	0.0050									
1,2-Dichloropropane	ND	0.0050									
2-Butanone	ND	0.010									
2-Hexanone	ND	0.010									
4-Methyl-2-pentanone	ND	0.010									
Acetone	ND	0.025									
Benzene	ND	0.0050									
Bromodichloromethane	ND	0.0050									
Bromoform	ND	0.0050									
Bromomethane	ND	0.010									
Carbon disulfide	ND	0.0050									
Carbon tetrachloride	ND	0.0050									
Chlorobenzene	ND	0.0050									
Chloroethane	ND	0.010									
Chloroform	ND	0.0050									
Chloromethane	ND	0.010									
cis-1,2-Dichloroethene	ND	0.0050									
cis-1,3-Dichloropropene	ND	0.0050									
Dibromochloromethane	ND	0.0050									
Ethylbenzene	ND	0.0050									
Methyl tert-butyl ether	ND	0.0050									
Methylene chloride	ND	0.010									
Styrene	ND	0.0050									
Tetrachloroethene	ND	0.0050									
Toluene	ND	0.0050									
trans-1,2-Dichloroethene	ND	0.0050									

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Page 25 of 33

Work Order: 0412059

Project:

32088, Willow Street Station-General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15577

Sample ID VBLK120804-2	SampType: MBLK		_	OR Units: mg/Kg		Prep Da				A-2_041208	ВА
Client ID: ZZZZZ	Batch ID: R15577	TestN	o: SW5035/8	260		Analysis Da	te: 12/8/2	004	SeqNo: 31	9434	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	0.0050									
Trichloroethene	ND	0.0050									
Vinyl chloride	ND	0.0050									
Xylenes, Total	ND	0.010									

Sample ID VLCS120804-2	SampType: LCS	TestCo	de: VOC_ENC	COR Units: mg/Kg		Prep Da	te:		Run ID: VC	DA-2_041208	3A
Client ID: ZZZZZ	Batch ID: R15577	Test	No: SW5035/ 8	3260		Analysis Da	ate: 12/8/2	004	SeqNo: 31	9436	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.05125	0.0050	0.05	0	103	70	130	0.04967	0	0	
1,1,2,2-Tetrachloroethane	0.04424	0.0050	0.05	0	88.5	70	130	0.0429	0	0	
1,1,2-Trichloroethane	0.04922	0.0050	0.05	0	98.4	70	130	0.04676	0	0	
1,1-Dichloroethane	0.0497	0.0050	0.05	0	99.4	70	130	0.04777	0	0	
1,1-Dichloroethene	0.04826	0.0050	0.05	0	96.5	70	130	0.04759	0	0	
1,2-Dichloroethane	0.04911	0.0050	0.05	0	98.2	70	130	0.04708	0	0	
1,2-Dichloropropane	0.04875	0.0050	0.05	0	97.5	70	130	0.04751	0	0	
2-Butanone	0.04764	0.010	0.05	0	95.3	70	130	0.04602	0	0	
2-Hexanone	0.05346	0.010	0.05	0	107	70	130	0.04915	0	0	
4-Methyl-2-pentanone	0.05134	0.010	0.05	0	103	70	130	0.05018	0	0	
Acetone	0.06857	0.025	0.05	0	137	50	150	0.06562	0	0	
Benzene	0.04926	0.0050	0.05	0	98.5	70	130	0.04815	0	0	
Bromodichloromethane	0.04461	0.0050	0.05	0	89.2	70	130	0.04367	0	0	
Bromoform	0.04706	0.0050	0.05	0	94.1	70	130	0.04439	0	0	
Bromomethane	0.0363	0.010	0.05	0	72.6	70	130	0.03322	0	0	
Carbon disulfide	0.06226	0.0050	0.05	0	125	70	130	0.0612	0	0	
Carbon tetrachloride	0.05116	0.0050	0.05	0	102	70	130	0.0499	0	0	
Chlorobenzene	0.05087	0.0050	0.05	0	102	70	130	0.04908	0	0	
Chloroethane	0.05161	0.010	0.05	0	103	70	130	0.04807	0	0	
Chloroform	0.05077	0.0050	0.05	0	102	70	130	0.04894	0	0	
Chloromethane	0.04012	0.010	0.05	0	80.2	70	130	0.03926	0	0	
cis-1,2-Dichloroethene	0.05023	0.0050	0.05	0	100	70	130	0.04759	0	0	

Qualifiers:

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R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blanl

Work Order: 0412059

Project:

0412059 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15577

Sample ID VLCS120804-2	SampType: LCS	TestCo	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	e:		Run ID: VC	A-2_041208A
Client ID: ZZZZZ	Batch ID: R15577	TestN	lo: SW5035/ 8	3260		Analysis Da	te: 12/8/2 0	004	SeqNo: 319	9436
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit Qual
cis-1,3-Dichloropropene	0.04827	0.0050	0.05	0	96.5	70	130	0.04808	0	0
Dibromochloromethane	0.04824	0.0050	0.05	0	96.5	70	130	0.04652	0	0
Ethylbenzene	0.05063	0.0050	0.05	0	101	70	130	0.04929	0	0
Methyl tert-butyl ether	0.05061	0.0050	0.05	0	101	50	150	0.0466	0	0
Methylene chloride	0.04798	0.010	0.05	0	96	70	130	0.04492	0	0
Styrene	0.04846	0.0050	0.05	0	96.9	70	130	0.04727	0	0
Tetrachloroethene	0.05551	0.0050	0.05	0	111	70	130	0.05309	0	0
Toluene	0.05078	0.0050	0.05	0	102	70	130	0.04881	0	0
trans-1,2-Dichloroethene	0.05083	0.0050	0.05	0	102	70	130	0.04828	0	0
trans-1,3-Dichloropropene	0.05373	0.0050	0.05	0	107	70	130	0.05117	0	0
Trichloroethene	0.05376	0.0050	0.05	0	108	70	130	0.05131	0	0
Vinyl chloride	0.05153	0.0050	0.05	0	103	70	130	0.05085	0	0
Xylenes, Total	0.1578	0.010	0.15	0	105	70	130	0.152	0	0

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

Work Order: 0412059

Project:

ANALYTICAL QC SUMMARY REPORT

32088, Willow Street Station- General Iron

BatchID: R15606

Sample ID VBLK120804a-2	SampType: MBLK	TestCod	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	te:		Run ID: VC	A-2_041208	зв
Client ID: ZZZZZ	Batch ID: R15606	TestN	lo: SW5035/ 8	3260		Analysis Da	te: 12/8/2	004	SeqNo: 32	0109	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.0050									
1,1,2,2-Tetrachloroethane	ND	0.0050									
1,1,2-Trichloroethane	ND	0.0050									
1,1-Dichloroethane	ND	0.0050									
1,1-Dichloroethene	ND	0.0050									
1,2-Dichloroethane	ND	0.0050									
1,2-Dichloropropane	ND	0.0050									
2-Butanone	ND	0.010									
2-Hexanone	ND	0.010									
4-Methyl-2-pentanone	ND	0.010									
Acetone	ND	0.025									
Benzene	ND	0.0050									
Bromodichloromethane	ND	0.0050									
Bromoform	ND	0.0050									
Bromomethane	ND	0.010									
Carbon disulfide	ND	0.0050									
Carbon tetrachloride	ND	0.0050									
Chlorobenzene	ND	0.0050									
Chloroethane	ND	0.010									
Chloroform	ND	0.0050									
Chloromethane	ND	0.010									
cis-1,2-Dichloroethene	ND	0.0050									
cis-1,3-Dichloropropene	ND	0.0050									
Dibromochloromethane	ND	0.0050									
Ethylbenzene	ND	0.0050									
Methyl tert-butyl ether	ND	0.0050									
Methylene chloride	0.00436	0.010									J
Styrene	ND	0.0050									
Tetrachloroethene	ND	0.0050									
Toluene	ND	0.0050									
trans-1,2-Dichloroethene	ND	0.0050									

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order: 0412059

ANALYTICAL QC SUMMARY REPORT

Project: 32088, Willow Street Station- General Iron BatchID: R15606

Sample ID VBLK120804a-2 Client ID: ZZZZZ	SampType: MBLK Batch ID: R15606		de: VOC_ENC	COR Units: mg/Kg		Prep Dat Analysis Da		004	Run ID: VC	_	ВВ
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	0.0050									
Trichloroethene	ND	0.0050									
Vinyl chloride	ND	0.0050									
Xylenes, Total	ND	0.010									

Sample ID VLCS120804A-2	SampType: LCS	TestCo	de: VOC_ENC	COR Units: mg/Kg		Prep Da	te:		Run ID: V	OA-2_04120	8B
Client ID: ZZZZZ	Batch ID: R15606	Test	No: SW5035/ 8	3260		Analysis Da	ite: 12/8/20	004	SeqNo: 32	20110	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.04839	0.0050	0.05	0	96.8	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.04354	0.0050	0.05	0	87.1	70	130	0	0		
1,1,2-Trichloroethane	0.0486	0.0050	0.05	0	97.2	70	130	0	0		
1,1-Dichloroethane	0.04704	0.0050	0.05	0	94.1	70	130	0	0		
1,1-Dichloroethene	0.04583	0.0050	0.05	0	91.7	70	130	0	0		
1,2-Dichloroethane	0.04964	0.0050	0.05	0	99.3	70	130	0	0		
1,2-Dichloropropane	0.04561	0.0050	0.05	0	91.2	70	130	0	0		
2-Butanone	0.04875	0.010	0.05	0	97.5	70	130	0	0		
2-Hexanone	0.04437	0.010	0.05	0	88.7	70	130	0	0		
4-Methyl-2-pentanone	0.04491	0.010	0.05	0	89.8	70	130	0	0		
Acetone	0.05825	0.025	0.05	0	116	50	150	0	0		
Benzene	0.04706	0.0050	0.05	0	94.1	70	130	0	0		
Bromodichloromethane	0.04388	0.0050	0.05	0	87.8	70	130	0	0		
Bromoform	0.04745	0.0050	0.05	0	94.9	70	130	0	0		
Bromomethane	0.03668	0.010	0.05	0	73.4	70	130	0	0		
Carbon disulfide	0.06115	0.0050	0.05	0	122	70	130	0	0		
Carbon tetrachloride	0.04788	0.0050	0.05	0	95.8	70	130	0	0		
Chlorobenzene	0.04764	0.0050	0.05	0	95.3	70	130	0	0		
Chloroethane	0.04616	0.010	0.05	0	92.3	70	130	0	0		
Chloroform	0.04913	0.0050	0.05	0	98.3	70	130	0	0		
Chloromethane	0.03657	0.010	0.05	0	73.1	70	130	0	0		
cis-1,2-Dichloroethene	0.04949	0.0050	0.05	0	99	70	130	0	0		

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Page 29 of 33

Work Order: 0412059

Project:

0412059 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15606

Sample ID VLCS120804A-2	SampType: LCS	TestCod	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	te:		Run ID: VO	A-2_041208	BB
Client ID: ZZZZZ	Batch ID: R15606	TestN	lo: SW5035/8	260		Analysis Da	te: 12/8/2 0	004	SeqNo: 320	0110	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qua
cis-1,3-Dichloropropene	0.04648	0.0050	0.05	0	93	70	130	0	0		
Dibromochloromethane	0.04848	0.0050	0.05	0	97	70	130	0	0		
Ethylbenzene	0.04738	0.0050	0.05	0	94.8	70	130	0	0		
Methyl tert-butyl ether	0.04914	0.0050	0.05	0	98.3	50	150	0	0		
Methylene chloride	0.04532	0.010	0.05	0.00436	81.9	70	130	0	0		
Styrene	0.045	0.0050	0.05	0	90	70	130	0	0		
Tetrachloroethene	0.05087	0.0050	0.05	0	102	70	130	0	0		
Toluene	0.04651	0.0050	0.05	0	93	70	130	0	0		
trans-1,2-Dichloroethene	0.04986	0.0050	0.05	0	99.7	70	130	0	0		
trans-1,3-Dichloropropene	0.05239	0.0050	0.05	0	105	70	130	0	0		
Trichloroethene	0.04827	0.0050	0.05	0	96.5	70	130	0	0		
Vinyl chloride	0.04699	0.0050	0.05	0	94	70	130	0	0		
Xylenes, Total	0.1462	0.010	0.15	0	97.5	70	130	0	0		
		0.010									
	SampType: LCSD			OR Units: mg/Kg		Prep Dat			Run ID: VO	A-2_041208	BB
Sample ID VLCSD120804A-2		TestCoo		OR Units: mg/Kg			te:	004	Run ID: VO SeqNo: 320	_	BB
Sample ID VLCSD120804A-2 Client ID: ZZZZZ	SampType: LCSD	TestCoo	de: VOC_ENC	OR Units: mg/Kg		Prep Dat Analysis Da	te: te: 12/8/2 0	004 RPD Ref Val		_	
Sample ID VLCSD120804A-2 Client ID: ZZZZZ Analyte	SampType: LCSD Batch ID: R15606	TestCoo TestN	de: VOC_ENC	OR Units: mg/Kg		Prep Dat Analysis Da	te: te: 12/8/2 0		SeqNo: 320	0111	
Sample ID VLCSD120804A-2 Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane	SampType: LCSD Batch ID: R15606 Result	TestCoo TestN PQL	de: VOC_ENC lo: SW5035/8	COR Units: mg/Kg 2260 SPK Ref Val	%REC	Prep Dat Analysis Da LowLimit	te: te: 12/8/2 0 HighLimit	RPD Ref Val	SeqNo: 320 %RPD	0111 RPDLimit	
Sample ID VLCSD120804A-2 Client ID: ZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	SampType: LCSD Batch ID: R15606 Result 0.04828	TestCod TestN PQL 0.0050	de: VOC_ENC lo: SW5035/8 SPK value	COR Units: mg/Kg 2260 SPK Ref Val	%REC 96.6	Prep Dat Analysis Da LowLimit 70	te: te: 12/8/2 0 HighLimit 130	RPD Ref Val 0.04839	SeqNo: 320 %RPD 0.228	RPDLimit 20	
Sample ID VLCSD120804A-2 Client ID: ZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane	SampType: LCSD Batch ID: R15606 Result 0.04828 0.04338	TestCoo TestN PQL 0.0050 0.0050	de: VOC_ENC lo: SW5035/8 SPK value 0.05 0.05	SPK Ref Val	%REC 96.6 86.8	Prep Dat Analysis Da LowLimit 70 70	te: te: 12/8/20 HighLimit 130 130	RPD Ref Val 0.04839 0.04354	SeqNo: 320 %RPD 0.228 0.368	PDLimit 20 20	
Sample ID VLCSD120804A-2 Client ID: ZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane	SampType: LCSD Batch ID: R15606 Result 0.04828 0.04338 0.04782	TestCod TestN PQL 0.0050 0.0050 0.0050	de: VOC_ENC do: SW5035/8 SPK value 0.05 0.05 0.05	SPK Ref Val 0 0 0	%REC 96.6 86.8 95.6	Prep Dat Analysis Da LowLimit 70 70 70	te: te: 12/8/2 HighLimit 130 130	RPD Ref Val 0.04839 0.04354 0.0486	SeqNo: 320 %RPD 0.228 0.368 1.62	PDLimit RPDLimit 20 20 20 20	
Sample ID VLCSD120804A-2 Client ID: ZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane	SampType: LCSD Batch ID: R15606 Result 0.04828 0.04338 0.04782 0.04822	TestCod TestN PQL 0.0050 0.0050 0.0050 0.0050	de: VOC_ENC lo: SW5035/8 SPK value 0.05 0.05 0.05 0.05	COR Units: mg/Kg 2260 SPK Ref Val 0 0 0	%REC 96.6 86.8 95.6 96.4	Prep Dat Analysis Da LowLimit 70 70 70 70	te: HighLimit 130 130 130 130	RPD Ref Val 0.04839 0.04354 0.0486 0.04704	SeqNo: 320 %RPD 0.228 0.368 1.62 2.48	PDLimit RPDLimit 20 20 20 20 20	
Sample ID VLCSD120804A-2 Client ID: ZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane	SampType: LCSD Batch ID: R15606 Result 0.04828 0.04338 0.04782 0.04822 0.04525	TestCod TestN PQL 0.0050 0.0050 0.0050 0.0050 0.0050	de: VOC_ENC do: SW5035/8 SPK value 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0	%REC 96.6 86.8 95.6 96.4 90.5	Prep Dat Analysis Da LowLimit 70 70 70 70 70	te: te: 12/8/2 0 HighLimit 130 130 130 130 130	RPD Ref Val 0.04839 0.04354 0.0486 0.04704 0.04583	SeqNo: 32 6 %RPD 0.228 0.368 1.62 2.48 1.27	PDLimit 20 20 20 20 20 20 20 20	
Sample ID VLCSD120804A-2 Client ID: ZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane	SampType: LCSD Batch ID: R15606 Result 0.04828 0.04338 0.04782 0.04822 0.04525 0.04803	TestCod TestN PQL 0.0050 0.0050 0.0050 0.0050 0.0050	de: VOC_ENC do: SW5035/8 SPK value 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0	%REC 96.6 86.8 95.6 96.4 90.5 96.1	Prep Dat Analysis Da LowLimit 70 70 70 70 70 70	te: HighLimit 130 130 130 130 130 130 130	RPD Ref Val 0.04839 0.04354 0.0486 0.04704 0.04583 0.04964	SeqNo: 326 %RPD 0.228 0.368 1.62 2.48 1.27 3.30	PDLimit RPDLimit 20 20 20 20 20 20 20 20 20 20	
Sample ID VLCSD120804A-2 Client ID: ZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone	SampType: LCSD Batch ID: R15606 Result 0.04828 0.04338 0.04782 0.04822 0.04525 0.04803 0.04651	TestCod TestN PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	de: VOC_ENC lo: SW5035/8 SPK value 0.05 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0 0 0	%REC 96.6 86.8 95.6 96.4 90.5 96.1 93	Prep Dat Analysis Da LowLimit 70 70 70 70 70 70	te: te: 12/8/20 HighLimit 130 130 130 130 130 130 130	RPD Ref Val 0.04839 0.04354 0.0486 0.04704 0.04583 0.04964 0.04561	%RPD 0.228 0.368 1.62 2.48 1.27 3.30 1.95	PDLimit RPDLimit 20 20 20 20 20 20 20 20 20 20 20 20	
Sample ID VLCSD120804A-2 Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone 2-Hexanone	SampType: LCSD Batch ID: R15606 Result 0.04828 0.04338 0.04782 0.04822 0.04525 0.04803 0.04651 0.04659	TestCod TestN PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	de: VOC_ENC lo: SW5035/8 SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0 0 0 0 0	%REC 96.6 86.8 95.6 96.4 90.5 96.1 93 93.2	Prep Dat Analysis Da LowLimit 70 70 70 70 70 70 70	te: te: 12/8/20 HighLimit 130 130 130 130 130 130 130 130 130	RPD Ref Val 0.04839 0.04354 0.0486 0.04704 0.04583 0.04964 0.04561 0.04875	SeqNo: 326 %RPD 0.228 0.368 1.62 2.48 1.27 3.30 1.95 4.53	PDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	
Sample ID VLCSD120804A-2 Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone 2-Hexanone 4-Methyl-2-pentanone	SampType: LCSD Batch ID: R15606 Result 0.04828 0.04338 0.04782 0.04822 0.04525 0.04803 0.04651 0.04659 0.04416	TestCod TestN PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.010	de: VOC_ENC do: SW5035/8 SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.0	SPK Ref Val 0 0 0 0 0 0 0 0 0 0 0 0	%REC 96.6 86.8 95.6 96.4 90.5 96.1 93 93.2 88.3	Prep Dat Analysis Da LowLimit 70 70 70 70 70 70 70 70	te: te: 12/8/20 HighLimit 130 130 130 130 130 130 130 130 130 130	RPD Ref Val 0.04839 0.04354 0.0486 0.04704 0.04583 0.04964 0.04561 0.04875 0.04437	%RPD 0.228 0.368 1.62 2.48 1.27 3.30 1.95 4.53 0.474	PDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	
Sample ID VLCSD120804A-2 Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone	SampType: LCSD Batch ID: R15606 Result 0.04828 0.04338 0.04782 0.04822 0.04525 0.04803 0.04651 0.04659 0.04416 0.04471	TestCod TestN PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0010 0.010 0.010	de: VOC_ENC lo: SW5035/8 SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.0	SPK Ref Val 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	%REC 96.6 86.8 95.6 96.4 90.5 96.1 93 93.2 88.3 89.4	Prep Date Analysis Date LowLimit 70 70 70 70 70 70 70 70 70 70 70 70 70	te: HighLimit 130 130 130 130 130 130 130 130 130 13	RPD Ref Val 0.04839 0.04354 0.0486 0.04704 0.04583 0.04964 0.04561 0.04875 0.04437 0.04491	SeqNo: 326 %RPD 0.228 0.368 1.62 2.48 1.27 3.30 1.95 4.53 0.474 0.446	20 20 20 20 20 20 20 20 20 20 20 20 20	Q ua

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order: 0412059

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15606

Sample ID VLCSD120804A-2	SampType: LCSD	TestCod	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	e:		Run ID: VO	A-2_041208	В
Client ID: ZZZZZ	Batch ID: R15606	TestN	lo: SW5035/8	260		Analysis Da	te: 12/8/2 0	004	SeqNo: 320	0111	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.04786	0.0050	0.05	0	95.7	70	130	0.04745	0.860	20	
Bromomethane	0.03691	0.010	0.05	0	73.8	70	130	0.03668	0.625	20	
Carbon disulfide	0.0626	0.0050	0.05	0	125	70	130	0.06115	2.34	20	
Carbon tetrachloride	0.04784	0.0050	0.05	0	95.7	70	130	0.04788	0.0836	20	
Chlorobenzene	0.04848	0.0050	0.05	0	97	70	130	0.04764	1.75	20	
Chloroethane	0.04874	0.010	0.05	0	97.5	70	130	0.04616	5.44	20	
Chloroform	0.05087	0.0050	0.05	0	102	70	130	0.04913	3.48	20	
Chloromethane	0.03826	0.010	0.05	0	76.5	70	130	0.03657	4.52	20	
cis-1,2-Dichloroethene	0.04804	0.0050	0.05	0	96.1	70	130	0.04949	2.97	20	
cis-1,3-Dichloropropene	0.04613	0.0050	0.05	0	92.3	70	130	0.04648	0.756	20	
Dibromochloromethane	0.04855	0.0050	0.05	0	97.1	70	130	0.04848	0.144	20	
Ethylbenzene	0.04731	0.0050	0.05	0	94.6	70	130	0.04738	0.148	20	
Methyl tert-butyl ether	0.04821	0.0050	0.05	0	96.4	50	150	0.04914	1.91	20	
Methylene chloride	0.04605	0.010	0.05	0.00436	83.4	70	130	0.04532	1.60	20	
Styrene	0.04678	0.0050	0.05	0	93.6	70	130	0.045	3.88	20	
Tetrachloroethene	0.04885	0.0050	0.05	0	97.7	70	130	0.05087	4.05	20	
Toluene	0.04734	0.0050	0.05	0	94.7	70	130	0.04651	1.77	20	
trans-1,2-Dichloroethene	0.04728	0.0050	0.05	0	94.6	70	130	0.04986	5.31	20	
trans-1,3-Dichloropropene	0.05236	0.0050	0.05	0	105	70	130	0.05239	0.0573	20	
Trichloroethene	0.04631	0.0050	0.05	0	92.6	70	130	0.04827	4.14	20	
Vinyl chloride	0.04695	0.0050	0.05	0	93.9	70	130	0.04699	0.0852	20	
Xylenes, Total	0.1471	0.010	0.15	0	98.1	70	130	0.1462	0.586	20	

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

Work Order: 0412059

ANALYTICAL QC SUMMARY REPORT

BatchID: R15479

Project: 32088, Willow Street Station- General Iron

Sample ID MBLK2	SampType: MBLK	TestCode: PMOIST	Units: wt%	Prep Date:	12/2/2004	Run ID: BALANCE_041	202B
Client ID: ZZZZZ	Batch ID: R15479	TestNo: D2974		Analysis Date	: 12/3/2004	SeqNo: 317464	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit H	HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Percent Moisture	ND	0.01000					*
Sample ID LCS-S2	SampType: LCS	TestCode: PMOIST	Units: wt%	Prep Date:	12/2/2004	Run ID: BALANCE_041	202B
Client ID: ZZZZZ	Batch ID: R15479	TestNo: D2974		Analysis Date	12/3/2004	SeqNo: 317465	
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit H	HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Percent Moisture	4.67	0.01000 5	0	93.4 80	120 0	0	*
Sample ID LCS-W2	SampType: LCS	TestCode: PMOIST	Units: wt%	Prep Date:	12/2/2004	Run ID: BALANCE_041	202B
Sample ID LCS-W2 Client ID: ZZZZZ	SampType: LCS Batch ID: R15479	TestCode: PMOIST TestNo: D2974	Units: wt%	Prep Date: Analysis Date		Run ID: BALANCE_041 SeqNo: 317466	202B
			Units: wt%	Analysis Date		_	202B Qual
Client ID: ZZZZZ	Batch ID: R15479	TestNo: D2974		Analysis Date	: 12/3/2004	SeqNo: 317466	
Client ID: ZZZZZ Analyte	Batch ID: R15479 Result 99.82	TestNo: D2974 PQL SPK value	SPK Ref Val	Analysis Date	: 12/3/2004 HighLimit RPD Ref Val	SeqNo: 317466 %RPD RPDLimit	Qual *
Client ID: ZZZZZ Analyte Percent Moisture	Batch ID: R15479 Result 99.82	TestNo: D2974 PQL SPK value 0.01000 99.8	SPK Ref Val	Analysis Date %REC LowLimit F	: 12/3/2004 HighLimit RPD Ref Val 120 0	SeqNo: 317466 %RPD RPDLimit	Qual *
Client ID: ZZZZZ Analyte Percent Moisture Sample ID 0412059-002B DU	Batch ID: R15479 Result 99.82 JP SampType: DUP	TestNo: D2974 PQL SPK value 0.01000 99.8 TestCode: PMOIST	SPK Ref Val	Analysis Date **REC LowLimit H 100 80 Prep Date: Analysis Date	: 12/3/2004 HighLimit RPD Ref Val 120 0	SeqNo: 317466 %RPD RPDLimit 0 Run ID: BALANCE_041	Qual *

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

Work Order: 0412059

ANALYTICAL QC SUMMARY REPORT

Project: 32088, Willow Street Station- General Iron BatchID: R15496

Sample ID	MBLK	SampType:	MBLK	TestCod	e: PMOIST	Units: wt%		Prep Date:	12/3/20	04	Run ID: BA	ALANCE_041	203A
Client ID:	ZZZZZ	Batch ID:	R15496	TestN	o: D2974			Analysis Date:	12/4/20	04	SeqNo: 31	7745	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit Hi	ighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Mo	oisture		ND	0.01000									*
Sample ID	LCS-S	SampType:	LCS	TestCod	e: PMOIST	Units: wt%		Prep Date:	12/3/20	04	Run ID: BA	ALANCE_041	203A
Client ID:	ZZZZZ	Batch ID:	R15496	TestN	o: D2974			Analysis Date:	12/4/20	04	SeqNo: 31	7746	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit Hi	ighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Mo	oisture		4.46	0.01000	5	0	89.2	80	120	0	0		*
Sample ID	LCS-W	SampType:	LCS	TestCod	e: PMOIST	Units: wt%		Prep Date:	12/3/20	04	Run ID: BA	ALANCE_041	203A
Client ID:	ZZZZZ	Batch ID:	R15496	TectN	o: D2974			Analysis Date:	12/4/20	04	SeqNo: 31	7747	
		Daton ID.	1113430	16301	O. DE014			Allalysis Date.	12/4/20	04	Sequo. 31		
Analyte		Batti IB.	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit Hi		RPD Ref Val	%RPD	RPDLimit	Qual
Analyte Percent Mo		Daterrio.				SPK Ref Val		•			·		Qual *
Percent Mo	pisture	SampType:	Result 99.8	PQL 0.01000	SPK value		%REC	LowLimit Hi	ighLimit	RPD Ref Val	%RPD		*
Percent Mo	pisture		Result 99.8	PQL 0.01000 TestCod	SPK value	0	%REC 100	LowLimit Hi	120 12/3/20	RPD Ref Val 0	%RPD	RPDLimit	*
Percent Mo	0411503-005B DUP	SampType:	Result 99.8 DUP	PQL 0.01000 TestCod	SPK value 99.8 e: PMOIST	0	%REC 100	LowLimit Hi 80 Prep Date:	120 12/3/20 12/4/20	RPD Ref Val 0	%RPD 0 Run ID: B	RPDLimit	*

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

R - RPD outside accepted recovery limits

2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

December 15, 2004

Burns & McDonnell 2601 W. 22nd Street

OakBrook, IL 60523-1229 Telephone: (312) 563-0371 Fax: (630) 990-0301

RE: 32088, Willow Street Station- General Iron STAT Project No: 0412085

Dear Diane Saftic:

STAT Analysis received 6 samples for the referenced project on 12/3/2004. The analytical results are presented in the following report.

This report is revised to reflect changes made after the initial report was issued.

All analyses were performed in accordance with the requirements of 35 IAC part 186 (Accreditation #100445). Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 563-0371.

Sincerely,

Craig Chawla

Project Manager

The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory.

Date: December 15, 2004

Client: Burns & McDonnell

Project: 32088, Willow Street Station-General Iron Work Order Sample Summary

Lab Order: 0412085

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
0412085-001A	WSS-SB53-001	8-10'	12/3/2004 8:05:00 AM	12/3/2004
0412085-001B	WSS-SB53-001	8-10'	12/3/2004 8:05:00 AM	12/3/2004
0412085-002A	WSS-SB53-002	14-16'	12/3/2004 8:20:00 AM	12/3/2004
0412085-002B	WSS-SB53-002	14-16'	12/3/2004 8:20:00 AM	12/3/2004
0412085-003A	WSS-SB53-003	18-20'	12/3/2004 8:35:00 AM	12/3/2004
0412085-003B	WSS-SB53-003	18-20'	12/3/2004 8:35:00 AM	12/3/2004
0412085-004A	TB05			12/3/2004
0412085-005A	WSS-SB59-001	8-10'	12/3/2004 12:10:00 PM	12/3/2004
0412085-005B	WSS-SB59-001	8-10'	12/3/2004 12:10:00 PM	12/3/2004
0412085-006A	WSS-SB59-002	16-18'	12/3/2004 12:25:00 PM	12/3/2004
0412085-006B	WSS-SB59-002	16-18'	12/3/2004 12:25:00 PM	12/3/2004

Page 1 of 1

Date: *December 15, 2004*

CLIENT: Burns & McDonnell

Project: 32088, Willow Street Station- General Iron CASE NARRATIVE

Lab Order: 0412085

Methylene Chloride present in VOC soil samples is a possible lab artifact.

In VOC water LCSD analysis (analyzed 12/04/04), Carbon Disulfide had high recovery (131% recovery, QC limits 70-130) and Acetone had RPD greater than 20%.

Due to matrix interference, Sample WSSS-SB53-003 (0412085-003) had VOC surrogate Toluene-d8 out of control for both analysis and reanalysis (79%/81% recovery, QC Limits 85-110).

Page 1 of 1

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Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client: Client Sample ID:** WSS-SB53-001

Lab Order: 0412085 Tag Number:

Project: 32088, Willow Street Station-General Iron **Collection Date:** 12/3/2004 8:05:00 AM

Lab ID: 0412085-001A **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF 1	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50)35/8260E	3	Prep	Date: 12/4/2004	Analyst: PS
Acetone	ND	0.036	m	ng/Kg-dry	1	12/9/2004
Benzene	0.0086	0.0073	m	ng/Kg-dry	1	12/9/2004
Bromodichloromethane	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
Bromoform	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
Bromomethane	ND	0.015	m	ng/Kg-dry	1	12/9/2004
2-Butanone	ND	0.015	m	ng/Kg-dry	1	12/9/2004
Carbon disulfide	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
Carbon tetrachloride	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
Chlorobenzene	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
Chloroethane	ND	0.015	m	ng/Kg-dry	1	12/9/2004
Chloroform	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
Chloromethane	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
Dibromochloromethane	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
1,1-Dichloroethane	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
1,2-Dichloroethane	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
1,1-Dichloroethene	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
cis-1,2-Dichloroethene	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
trans-1,2-Dichloroethene	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
1,2-Dichloropropane	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
cis-1,3-Dichloropropene	ND	0.0073	m	ng/Kg-dry	1	12/9/2004
trans-1,3-Dichloropropene	ND	0.0073		ng/Kg-dry	1	12/9/2004
Ethylbenzene	ND	0.0073		ng/Kg-dry	1	12/9/2004
2-Hexanone	ND	0.015	m	ng/Kg-dry	1	12/9/2004
4-Methyl-2-pentanone	ND	0.015	m	ng/Kg-dry	1	12/9/2004
Methylene chloride	0.018	0.015		ng/Kg-dry	1	12/9/2004
Methyl tert-butyl ether	ND	0.0073		ng/Kg-dry	1	12/9/2004
Styrene	ND	0.0073		ng/Kg-dry	1	12/9/2004
1,1,2,2-Tetrachloroethane	ND	0.0073		ng/Kg-dry	1	12/9/2004
Tetrachloroethene	ND	0.0073		ng/Kg-dry	1	12/9/2004
Toluene	ND	0.0073		ng/Kg-dry	1	12/9/2004
1,1,1-Trichloroethane	ND	0.0073		ng/Kg-dry	1	12/9/2004
1,1,2-Trichloroethane	ND	0.0073		ng/Kg-dry	1	12/9/2004
Trichloroethene	ND	0.0073		ng/Kg-dry	1	12/9/2004
Vinyl chloride	ND	0.0073		ng/Kg-dry	1	12/9/2004
Xylenes, Total	ND	0.015		ng/Kg-dry	1	12/9/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Page 1 of 15 H - Holding time exceeded

2201 West Campbell Park Drive Chicago, IL 60612-3547 Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client: Client Sample ID:** WSS-SB53-001

Lab Order: 0412085 Tag Number: 8-10'

Project: 32088, Willow Street Station-General Iron **Collection Date:** 12/3/2004 8:05:00 AM

Lab ID: 0412085-001B Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF I	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SW	/3580A)	Prep	Date: 12/7/2004	Analyst: JF
TPH (Gasoline)	ND	23	*	mg/Kg-dry	1	12/9/2004
TPH (Diesel)	400	23	*	mg/Kg-dry	1	12/9/2004
TPH (Oil)	670	23	*	mg/Kg-dry	1	12/9/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550E	B) Prep	Date: 12/7/2004	Analyst: VS
Acenaphthene	2	0.31	I	mg/Kg-dry	10	12/9/2004
Acenaphthylene	1.6	0.31	I	mg/Kg-dry	10	12/9/2004
Anthracene	2.6	0.31	1	mg/Kg-dry	10	12/9/2004
Benz(a)anthracene	5.2	3.1	1	mg/Kg-dry	100	12/9/2004
Benzo(b)fluoranthene	1.4	0.31	1	mg/Kg-dry	10	12/9/2004
Benzo(k)fluoranthene	1.8	0.31	1	mg/Kg-dry	10	12/9/2004
Benzo(g,h,i)perylene	1	0.31	I	mg/Kg-dry	10	12/9/2004
Benzo(a)pyrene	4.8	3.1	I	mg/Kg-dry	100	12/9/2004
Chrysene	6.8	3.1	I	mg/Kg-dry	100	12/9/2004
Dibenz(a,h)anthracene	0.5	0.31		mg/Kg-dry	10	12/9/2004
Fluoranthene	7.8	3.1	ĺ	mg/Kg-dry	100	12/9/2004
Fluorene	4	3.1	1	mg/Kg-dry	100	12/9/2004
Indeno(1,2,3-cd)pyrene	0.92	0.31	1	mg/Kg-dry	10	12/9/2004
Naphthalene	1.5	0.31	1	mg/Kg-dry	10	12/9/2004
Phenanthrene	14	3.1	1	mg/Kg-dry	100	12/9/2004
Pyrene	12	3.1		mg/Kg-dry	100	12/9/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	3550B)	Prep	Date: 12/7/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.41	=	mg/Kg-dry	1	12/10/2004
Bis(2-chloroethyl)ether	ND	0.41	1	mg/Kg-dry	1	12/10/2004
Bis(2-ethylhexyl)phthalate	ND	0.41		mg/Kg-dry	1	12/10/2004
4-Bromophenyl phenyl ether	ND	0.41	ı	mg/Kg-dry	1	12/10/2004
Butyl benzyl phthalate	ND	0.41		mg/Kg-dry	1	12/10/2004
Carbazole	ND	0.41		mg/Kg-dry	1	12/10/2004
4-Chloro-3-methylphenol	ND	0.41		mg/Kg-dry	1	12/10/2004
4-Chloroaniline	ND	0.41		mg/Kg-dry	1	12/10/2004
2-Chloronaphthalene	ND	0.41		mg/Kg-dry	1	12/10/2004
2-Chlorophenol	ND	0.41		mg/Kg-dry	1	12/10/2004
4-Chlorophenyl phenyl ether	ND	0.41		mg/Kg-dry	1	12/10/2004
Dibenzofuran	ND	0.41		mg/Kg-dry	1	12/10/2004
1,2-Dichlorobenzene	ND	0.41		mg/Kg-dry	1	12/10/2004
1,3-Dichlorobenzene	ND	0.41		mg/Kg-dry	1	12/10/2004
1,4-Dichlorobenzene	ND	0.41		mg/Kg-dry	1	12/10/2004
3,3´-Dichlorobenzidine	ND	0.82		mg/Kg-dry	1	12/10/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 2 of 15

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB53-001

Lab Order: 0412085 **Tag Number:** 8-10'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/3/2004 8:05:00 AM

Lab ID: 0412085-001B **Matrix:** Soil

Analyses	Result	RL (Qualifier Un	its DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW3	550B)	Prep Date: 12/7	//2004 Analyst: PAB
2,4-Dichlorophenol	ND	0.41	mg/Ko	g-dry 1	12/10/2004
Diethyl phthalate	ND	0.41	mg/Kg	g-dry 1	12/10/2004
Dimethyl phthalate	ND	0.41	mg/Kg	g-dry 1	12/10/2004
Di-n-butyl phthalate	ND	0.41	mg/Ko	g-dry 1	12/10/2004
2,4-Dimethylphenol	ND	0.41	mg/Kg	g-dry 1	12/10/2004
4,6-Dinitro-2-methylphenol	ND	2	mg/Kg	g-dry 1	12/10/2004
2,4-Dinitrophenol	ND	2	mg/Kg	g-dry 1	12/10/2004
2,4-Dinitrotoluene	ND	0.21	mg/Kg	g-dry 1	12/10/2004
2,6-Dinitrotoluene	ND	0.21	mg/Kg	g-dry 1	12/10/2004
Di-n-octyl phthalate	ND	0.41	mg/Kg	g-dry 1	12/10/2004
Hexachlorobenzene	ND	0.41	mg/Kg	g-dry 1	12/10/2004
Hexachlorobutadiene	ND	0.41	mg/Kg	g-dry 1	12/10/2004
Hexachlorocyclopentadiene	ND	0.41	mg/Kg	g-dry 1	12/10/2004
Hexachloroethane	ND	0.41	mg/Kg	g-dry 1	12/10/2004
Isophorone	ND	0.41	mg/Kg	g-dry 1	12/10/2004
2-Methylnaphthalene	ND	0.41	mg/Kg	g-dry 1	12/10/2004
2-Methylphenol	ND	0.41	mg/Kg	g-dry 1	12/10/2004
4-Methylphenol	ND	0.41	mg/Kg	g-dry 1	12/10/2004
2-Nitroaniline	ND	2	mg/Kg	g-dry 1	12/10/2004
3-Nitroaniline	ND	2	mg/Kg	g-dry 1	12/10/2004
4-Nitroaniline	ND	2	mg/Kg	g-dry 1	12/10/2004
Nitrobenzene	ND	0.21	mg/Kg	g-dry 1	12/10/2004
2-Nitrophenol	ND	0.41	mg/Kg	g-dry 1	12/10/2004
4-Nitrophenol	ND	2	mg/Kg	g-dry 1	12/10/2004
N-Nitrosodi-n-propylamine	ND	0.21	mg/Kg	g-dry 1	12/10/2004
N-Nitrosodiphenylamine	ND	0.41	mg/Kg	g-dry 1	12/10/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.41	mg/Kg	g-dry 1	12/10/2004
Pentachlorophenol	ND	2	mg/Kg	g-dry 1	12/10/2004
Phenol	ND	0.41	mg/Kg	g-dry 1	12/10/2004
1,2,4-Trichlorobenzene	ND	0.41	mg/Kg	g-dry 1	12/10/2004
2,4,5-Trichlorophenol	ND	0.82	mg/Kg	g-dry 1	12/10/2004
2,4,6-Trichlorophenol	ND	0.41	mg/Kg	g-dry 1	12/10/2004
Percent Moisture	D2974	ļ		Prep Date: 12/6	/2004 Analyst: ASM
Percent Moisture	20.98	0.01	* wt	% 1	12/7/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 3 of 15

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Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB53-002

Lab Order: 0412085 **Tag Number:** 14-16'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/3/2004 8:20:00 AM

Lab ID: 0412085-002A **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50	035/8260E	3	Prep	Date: 12/4/2004	Analyst: PS
Acetone	0.1	0.048	m	ng/Kg-dry	1	12/9/2004
Benzene	0.21	0.0095	m	ng/Kg-dry	1	12/9/2004
Bromodichloromethane	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
Bromoform	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
Bromomethane	ND	0.019	m	ng/Kg-dry	1	12/9/2004
2-Butanone	0.023	0.019	m	ng/Kg-dry	1	12/9/2004
Carbon disulfide	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
Carbon tetrachloride	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
Chlorobenzene	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
Chloroethane	ND	0.019	m	ng/Kg-dry	1	12/9/2004
Chloroform	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
Chloromethane	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
Dibromochloromethane	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
1,1-Dichloroethane	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
1,2-Dichloroethane	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
1,1-Dichloroethene	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
cis-1,2-Dichloroethene	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
trans-1,2-Dichloroethene	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
1,2-Dichloropropane	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
cis-1,3-Dichloropropene	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
trans-1,3-Dichloropropene	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
Ethylbenzene	1.2	0.4	m	ng/Kg-dry	50	12/9/2004
2-Hexanone	ND	0.019	m	ng/Kg-dry	1	12/9/2004
4-Methyl-2-pentanone	ND	0.019	m	ng/Kg-dry	1	12/9/2004
Methylene chloride	0.035	0.019	B m	ng/Kg-dry	1	12/9/2004
Methyl tert-butyl ether	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
Styrene	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
1,1,2,2-Tetrachloroethane	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
Tetrachloroethene	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
Toluene	0.013	0.0095	m	ng/Kg-dry	1	12/9/2004
1,1,1-Trichloroethane	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
1,1,2-Trichloroethane	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
Trichloroethene	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
Vinyl chloride	ND	0.0095	m	ng/Kg-dry	1	12/9/2004
Xylenes, Total	1.7	0.79		ng/Kg-dry	50	12/9/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 4 of 15

2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB53-002

Lab Order: 0412085 **Tag Number:** 14-16'

Project: 32088, Willow Street Station-General Iron Collection Date: 12/3/2004 8:20:00 AM

Lab ID: 0412085-002B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SV	/3580A)	Prep	Date: 12/7/2004	Analyst: JF
TPH (Gasoline)	ND	25	•	ng/Kg-dry	1	12/9/2004
TPH (Diesel)	1000	25	* 1	mg/Kg-dry	1	12/9/2004
TPH (Oil)	890	25	* 1	mg/Kg-dry	1	12/9/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550E	B) Prep	Date: 12/7/2004	Analyst: VS
Acenaphthene	16	3.2		ng/Kg-dry	100	12/9/2004
Acenaphthylene	2.4	0.32	1	mg/Kg-dry	10	12/9/2004
Anthracene	16	3.2	1	mg/Kg-dry	100	12/9/2004
Benz(a)anthracene	14	3.2	1	mg/Kg-dry	100	12/9/2004
Benzo(b)fluoranthene	6.4	3.2	1	mg/Kg-dry	100	12/9/2004
Benzo(k)fluoranthene	6.5	3.2	1	mg/Kg-dry	100	12/9/2004
Benzo(g,h,i)perylene	1.6	0.32	ı	mg/Kg-dry	10	12/9/2004
Benzo(a)pyrene	11	3.2	ı	mg/Kg-dry	100	12/9/2004
Chrysene	15	3.2	ı	mg/Kg-dry	100	12/9/2004
Dibenz(a,h)anthracene	1.2	0.32	ı	mg/Kg-dry	10	12/9/2004
Fluoranthene	24	3.2	ı	mg/Kg-dry	100	12/9/2004
Fluorene	19	3.2	ı	mg/Kg-dry	100	12/9/2004
Indeno(1,2,3-cd)pyrene	1.8	0.32	ı	mg/Kg-dry	10	12/9/2004
Naphthalene	41	32	ı	mg/Kg-dry	1000	12/10/2004
Phenanthrene	57	32	ı	mg/Kg-dry	1000	12/10/2004
Pyrene	27	3.2	1	mg/Kg-dry	100	12/9/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	/3550B)	Prep	Date: 12/7/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.43	-	ng/Kg-dry	1	12/10/2004
Bis(2-chloroethyl)ether	ND	0.43	ı	mg/Kg-dry	1	12/10/2004
Bis(2-ethylhexyl)phthalate	ND	0.43	ı	mg/Kg-dry	1	12/10/2004
4-Bromophenyl phenyl ether	ND	0.43	ı	mg/Kg-dry	1	12/10/2004
Butyl benzyl phthalate	ND	0.43	ı	mg/Kg-dry	1	12/10/2004
Carbazole	5.1	0.43	ı	mg/Kg-dry	1	12/10/2004
4-Chloro-3-methylphenol	ND	0.43		mg/Kg-dry	1	12/10/2004
4-Chloroaniline	ND	0.43	1	mg/Kg-dry	1	12/10/2004
2-Chloronaphthalene	ND	0.43	1	mg/Kg-dry	1	12/10/2004
2-Chlorophenol	ND	0.43	1	mg/Kg-dry	1	12/10/2004
4-Chlorophenyl phenyl ether	ND	0.43		ng/Kg-dry	1	12/10/2004
Dibenzofuran	4.9	0.43		ng/Kg-dry	1	12/10/2004
1,2-Dichlorobenzene	ND	0.43		ng/Kg-dry	1	12/10/2004
1,3-Dichlorobenzene	ND	0.43		ng/Kg-dry	1	12/10/2004
1,4-Dichlorobenzene	ND	0.43		ng/Kg-dry	1	12/10/2004
3,3´-Dichlorobenzidine	ND	0.85		mg/Kg-dry	1	12/10/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

> **Report Date:** December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB53-002

Lab Order: 0412085 **Tag Number:** 14-16'

Project: 32088, Willow Street Station-General Iron Collection Date: 12/3/2004 8:20:00 AM

Lab ID: 0412085-002B **Matrix:** Soil

Analyses	Result	RL Qua	alifier Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW3550	DB) Prep	Date: 12/7/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.43	mg/Kg-dry	1	12/10/2004
Diethyl phthalate	ND	0.43	mg/Kg-dry	1	12/10/2004
Dimethyl phthalate	ND	0.43	mg/Kg-dry	1	12/10/2004
Di-n-butyl phthalate	ND	0.43	mg/Kg-dry	1	12/10/2004
2,4-Dimethylphenol	ND	0.43	mg/Kg-dry	1	12/10/2004
4,6-Dinitro-2-methylphenol	ND	2.1	mg/Kg-dry	1	12/10/2004
2,4-Dinitrophenol	ND	2.1	mg/Kg-dry	1	12/10/2004
2,4-Dinitrotoluene	ND	0.22	mg/Kg-dry	1	12/10/2004
2,6-Dinitrotoluene	ND	0.22	mg/Kg-dry	1	12/10/2004
Di-n-octyl phthalate	ND	0.43	mg/Kg-dry	1	12/10/2004
Hexachlorobenzene	ND	0.43	mg/Kg-dry	1	12/10/2004
Hexachlorobutadiene	ND	0.43	mg/Kg-dry	1	12/10/2004
Hexachlorocyclopentadiene	ND	0.43	mg/Kg-dry	1	12/10/2004
Hexachloroethane	ND	0.43	mg/Kg-dry	1	12/10/2004
Isophorone	ND	0.43	mg/Kg-dry	1	12/10/2004
2-Methylnaphthalene	37	4.3	mg/Kg-dry	10	12/10/2004
2-Methylphenol	ND	0.43	mg/Kg-dry	1	12/10/2004
4-Methylphenol	ND	0.43	mg/Kg-dry	1	12/10/2004
2-Nitroaniline	ND	2.1	mg/Kg-dry	1	12/10/2004
3-Nitroaniline	ND	2.1	mg/Kg-dry	1	12/10/2004
4-Nitroaniline	ND	2.1	mg/Kg-dry	1	12/10/2004
Nitrobenzene	ND	0.22	mg/Kg-dry	1	12/10/2004
2-Nitrophenol	ND	0.43	mg/Kg-dry	1	12/10/2004
4-Nitrophenol	ND	2.1	mg/Kg-dry	1	12/10/2004
N-Nitrosodi-n-propylamine	ND	0.22	mg/Kg-dry	1	12/10/2004
N-Nitrosodiphenylamine	ND	0.43	mg/Kg-dry	1	12/10/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.43	mg/Kg-dry	1	12/10/2004
Pentachlorophenol	ND	2.1	mg/Kg-dry	1	12/10/2004
Phenol	ND	0.43	mg/Kg-dry	1	12/10/2004
1,2,4-Trichlorobenzene	ND	0.43	mg/Kg-dry	1	12/10/2004
2,4,5-Trichlorophenol	ND	0.85	mg/Kg-dry	1	12/10/2004
2,4,6-Trichlorophenol	ND	0.43	mg/Kg-dry	1	12/10/2004
Percent Moisture	D2974		Prep	Date: 12/6/2004	Analyst: ASM
Percent Moisture	24.30	0.01	* wt%	1	12/7/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client:

Burns & McDonnell

Client Sample ID: WSS-SB53-003

Lab Order:

0412085

0412085-003A

Tag Number: 18-20'

Project: Lab ID: 32088, Willow Street Station-General Iron

Collection Date: 12/3/2004 8:35:00 AM

Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS		35/8260E	3	Prep	Date: 12/4/2004	
Acetone	ND UJ	0.031	mę	g/Kg-dry	1	12/9/2004
Benzene	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
Bromodichloromethane	ND	0.0062	· mg	g/Kg-dry	1	12/9/2004
Bromoform	ND	0.0062	mę	g/Kg-dry	1	12/9/2004
Bromomethane	ND	0.012	mę	g/Kg-dry	1	12/9/2004
2-Butanone	ND	0.012	mg	g/Kg-dry	1	12/9/2004
Carbon disulfide	ND	0.0062	mç	g/Kg-dry	1	12/9/2004
Carbon tetrachloride	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
Chlorobenzene	ND	0.0062	mę	g/Kg-dry	1	12/9/2004
Chloroethane	ND	0.012	mg	g/Kg-dry	1	12/9/2004
Chloroform	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
Chloromethane	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
Dibromochloromethane	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
1,1-Dichloroethane	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
1,2-Dichloroethane	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
1,1-Dichloroethene	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
cis-1,2-Dichloroethene	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
trans-1,2-Dichloroethene	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
1,2-Dichloropropane	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
cis-1,3-Dichloropropene	ND	0.0062	- mg	g/Kg-dry	1 .	12/9/2004
trans-1,3-Dichloropropene	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
Ethylbenzene	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
2-Hexanone	ND	0.012	mg	g/Kg-dry	1	12/9/2004
4-Methyl-2-pentanone	ND 🎶	0.012	mg	g/Kg-dry	1	12/9/2004
Methylene chloride	0.026 ナ	0.012	B mg	g/Kg-dry	1	12/9/2004
Methyl tert-butyl ether	NDUJ	0.0062	mg	g/Kg-dry	1	12/9/2004
Styrene	ND 1	0.0062	mg	g/Kg-dry	1	12/9/2004
1,1,2,2-Tetrachloroethane	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
Tetrachloroethene	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
Toluene	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
1,1,1-Trichloroethane	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
1,1,2-Trichloroethane	ND	0.0062	mg	g/Kg-dry	1	12/9/2004
Trichloroethene	ND	0.0062		g/Kg-dry	1	12/9/2004
Vinyl chloride	ND I	0.0062		g/Kg-dry	1	12/9/2004
Xylenes, Total	ND 🖖	0.012	_	g/Kg-dry	1	12/9/2004

J=estimated value, poor surrogate recovery. SFA UJ=estimated non-detect value; poor surrogate recovery

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB53-003

Lab Order: 0412085 **Tag Number:** 18-20'

Project: 32088, Willow Street Station-General Iron Collection Date: 12/3/2004 8:35:00 AM

Lab ID: 0412085-003B **Matrix:** Soil

Analyses	Result	RL Qual	lifier Units	DF I	Date Analyzed
Total Petroleum Hydrocarbons	SW80	15M (SW3580	A) Prep	Date: 12/7/2004	Analyst: JF
TPH (Gasoline)	ND	22	* mg/Kg-dry	1	12/9/2004
TPH (Diesel)	ND	22	* mg/Kg-dry	1	12/9/2004
TPH (Oil)	ND	22	* mg/Kg-dry	1	12/9/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM (SW3	550B) Prep	Date: 12/7/2004	Analyst: VS
Acenaphthene	0.11	0.03	mg/Kg-dry	1	12/8/2004
Acenaphthylene	0.046	0.03	mg/Kg-dry	1	12/8/2004
Anthracene	0.12	0.03	mg/Kg-dry	1	12/8/2004
Benz(a)anthracene	0.12	0.03	mg/Kg-dry	1	12/8/2004
Benzo(b)fluoranthene	0.054	0.03	mg/Kg-dry	1	12/8/2004
Benzo(k)fluoranthene	0.076	0.03	mg/Kg-dry	1	12/8/2004
Benzo(g,h,i)perylene	0.042	0.03	mg/Kg-dry	1	12/8/2004
Benzo(a)pyrene	0.099	0.03	mg/Kg-dry	1	12/8/2004
Chrysene	0.14	0.03	mg/Kg-dry	1	12/8/2004
Dibenz(a,h)anthracene	ND	0.03	mg/Kg-dry	1	12/8/2004
Fluoranthene	0.22	0.03	mg/Kg-dry	1	12/8/2004
Fluorene	0.13	0.03	mg/Kg-dry	1	12/8/2004
Indeno(1,2,3-cd)pyrene	0.031	0.03	mg/Kg-dry	1	12/8/2004
Naphthalene	0.24	0.03	mg/Kg-dry	1	12/8/2004
Phenanthrene	0.48	0.3	mg/Kg-dry	10	12/9/2004
Pyrene	0.27	0.03	mg/Kg-dry	1	12/8/2004
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW3550E	3) Prep	Date: 12/7/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.4	mg/Kg-dry	1	12/9/2004
Bis(2-chloroethyl)ether	ND	0.4	mg/Kg-dry	1	12/9/2004
Bis(2-ethylhexyl)phthalate	ND	0.4	mg/Kg-dry	1	12/9/2004
4-Bromophenyl phenyl ether	ND	0.4	mg/Kg-dry	1	12/9/2004
Butyl benzyl phthalate	ND	0.4	mg/Kg-dry	1	12/9/2004
Carbazole	ND	0.4	mg/Kg-dry	1	12/9/2004
4-Chloro-3-methylphenol	ND	0.4	mg/Kg-dry	1	12/9/2004
4-Chloroaniline	ND	0.4	mg/Kg-dry	1	12/9/2004
2-Chloronaphthalene	ND	0.4	mg/Kg-dry	1	12/9/2004
2-Chlorophenol	ND	0.4	mg/Kg-dry	1	12/9/2004
4-Chlorophenyl phenyl ether	ND	0.4	mg/Kg-dry	1	12/9/2004
Dibenzofuran	ND	0.4	mg/Kg-dry	1	12/9/2004
1,2-Dichlorobenzene	ND	0.4	mg/Kg-dry	1	12/9/2004
1,3-Dichlorobenzene	ND	0.4	mg/Kg-dry	1	12/9/2004
1,4-Dichlorobenzene	ND	0.4	mg/Kg-dry	1	12/9/2004
3,3'-Dichlorobenzidine	ND	0.8	mg/Kg-dry	1	12/9/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB53-003

Lab Order: 0412085 **Tag Number:** 18-20'

Project: 32088, Willow Street Station-General Iron Collection Date: 12/3/2004 8:35:00 AM

Lab ID: 0412085-003B **Matrix:** Soil

Analyses	Result	RL (Qualifier Unit	s DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW827	70C (SW3	5 50B) P	rep Date: 12/7	7/2004 Analyst: PAB
2,4-Dichlorophenol	ND	0.4	mg/Kg-	dry 1	12/9/2004
Diethyl phthalate	ND	0.4	mg/Kg-	dry 1	12/9/2004
Dimethyl phthalate	ND	0.4	mg/Kg-	dry 1	12/9/2004
Di-n-butyl phthalate	ND	0.4	mg/Kg-	dry 1	12/9/2004
2,4-Dimethylphenol	ND	0.4	mg/Kg-	dry 1	12/9/2004
4,6-Dinitro-2-methylphenol	ND	1.9	mg/Kg-	dry 1	12/9/2004
2,4-Dinitrophenol	ND	1.9	mg/Kg-	dry 1	12/9/2004
2,4-Dinitrotoluene	ND	0.21	mg/Kg-	dry 1	12/9/2004
2,6-Dinitrotoluene	ND	0.21	mg/Kg-	dry 1	12/9/2004
Di-n-octyl phthalate	ND	0.4	mg/Kg-	dry 1	12/9/2004
Hexachlorobenzene	ND	0.4	mg/Kg-	dry 1	12/9/2004
Hexachlorobutadiene	ND	0.4	mg/Kg-	dry 1	12/9/2004
Hexachlorocyclopentadiene	ND	0.4	mg/Kg-	dry 1	12/9/2004
Hexachloroethane	ND	0.4	mg/Kg-	dry 1	12/9/2004
Isophorone	ND	0.4	mg/Kg-	dry 1	12/9/2004
2-Methylnaphthalene	ND	0.4	mg/Kg-	dry 1	12/9/2004
2-Methylphenol	ND	0.4	mg/Kg-	dry 1	12/9/2004
4-Methylphenol	ND	0.4	mg/Kg-	dry 1	12/9/2004
2-Nitroaniline	ND	1.9	mg/Kg-	dry 1	12/9/2004
3-Nitroaniline	ND	1.9	mg/Kg-	dry 1	12/9/2004
4-Nitroaniline	ND	1.9	mg/Kg-	dry 1	12/9/2004
Nitrobenzene	ND	0.21	mg/Kg-	dry 1	12/9/2004
2-Nitrophenol	ND	0.4	mg/Kg-	dry 1	12/9/2004
4-Nitrophenol	ND	1.9	mg/Kg-	dry 1	12/9/2004
N-Nitrosodi-n-propylamine	ND	0.21	mg/Kg-	dry 1	12/9/2004
N-Nitrosodiphenylamine	ND	0.4	mg/Kg-	dry 1	12/9/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.4	mg/Kg-	dry 1	12/9/2004
Pentachlorophenol	ND	1.9	mg/Kg-	dry 1	12/9/2004
Phenol	ND	0.4	mg/Kg-	dry 1	12/9/2004
1,2,4-Trichlorobenzene	ND	0.4	mg/Kg-	dry 1	12/9/2004
2,4,5-Trichlorophenol	ND	0.8	mg/Kg-	dry 1	12/9/2004
2,4,6-Trichlorophenol	ND	0.4	mg/Kg-	dry 1	12/9/2004
Percent Moisture	D2974		Р	rep Date: 12/6	/2004 Analyst: ASM
Percent Moisture	18.63	0.01	* wt%	1	12/7/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

Page 9 of 15

2201 West Campbell Park Drive Chicago, IL 60612-3547 Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Burns & McDonnell **Client: Client Sample ID:** WSS-SB59-001

Lab Order: 0412085 Tag Number:

Project: 32088, Willow Street Station-General Iron **Collection Date:** 12/3/2004 12:10:00 PM

Lab ID: 0412085-005A **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF I	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50)35/8260E	3	Prep	Date: 12/4/2004	Analyst: PS
Acetone	ND	0.028	m	g/Kg-dry	1	12/9/2004
Benzene	0.031	0.0055	m	g/Kg-dry	1	12/9/2004
Bromodichloromethane	ND	0.0055	m	g/Kg-dry	1	12/9/2004
Bromoform	ND	0.0055	m	g/Kg-dry	1	12/9/2004
Bromomethane	ND	0.011	m	g/Kg-dry	1	12/9/2004
2-Butanone	ND	0.011	m	g/Kg-dry	1	12/9/2004
Carbon disulfide	ND	0.0055	m	g/Kg-dry	1	12/9/2004
Carbon tetrachloride	ND	0.0055	m	g/Kg-dry	1	12/9/2004
Chlorobenzene	ND	0.0055	m	g/Kg-dry	1	12/9/2004
Chloroethane	ND	0.011	m	g/Kg-dry	1	12/9/2004
Chloroform	ND	0.0055	m	g/Kg-dry	1	12/9/2004
Chloromethane	ND	0.0055	m	g/Kg-dry	1	12/9/2004
Dibromochloromethane	ND	0.0055	m	g/Kg-dry	1	12/9/2004
1,1-Dichloroethane	ND	0.0055	m	g/Kg-dry	1	12/9/2004
1,2-Dichloroethane	ND	0.0055	m	g/Kg-dry	1	12/9/2004
1,1-Dichloroethene	ND	0.0055	m	g/Kg-dry	1	12/9/2004
cis-1,2-Dichloroethene	ND	0.0055	m	g/Kg-dry	1	12/9/2004
trans-1,2-Dichloroethene	ND	0.0055	m	g/Kg-dry	1	12/9/2004
1,2-Dichloropropane	ND	0.0055	m	g/Kg-dry	1	12/9/2004
cis-1,3-Dichloropropene	ND	0.0055	m	g/Kg-dry	1	12/9/2004
trans-1,3-Dichloropropene	ND	0.0055	m	g/Kg-dry	1	12/9/2004
Ethylbenzene	0.071	0.0055	m	g/Kg-dry	1	12/9/2004
2-Hexanone	ND	0.011	m	g/Kg-dry	1	12/9/2004
4-Methyl-2-pentanone	ND	0.011	m	g/Kg-dry	1	12/9/2004
Methylene chloride	0.017	0.011		g/Kg-dry	1	12/9/2004
Methyl tert-butyl ether	ND	0.0055		g/Kg-dry	1	12/9/2004
Styrene	ND	0.0055		g/Kg-dry	1	12/9/2004
1,1,2,2-Tetrachloroethane	ND	0.0055		g/Kg-dry	1	12/9/2004
Tetrachloroethene	ND	0.0055		g/Kg-dry	1	12/9/2004
Toluene	ND	0.0055		g/Kg-dry	1	12/9/2004
1,1,1-Trichloroethane	ND	0.0055		g/Kg-dry	1	12/9/2004
1,1,2-Trichloroethane	ND	0.0055		g/Kg-dry	1	12/9/2004
Trichloroethene	ND	0.0055		g/Kg-dry	1	12/9/2004
Vinyl chloride	ND	0.0055		g/Kg-dry	1	12/9/2004
Xylenes, Total	0.044	0.011		g/Kg-dry	1	12/9/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB59-001

Lab Order: 0412085 **Tag Number:** 8-10'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/3/2004 12:10:00 PM

Lab ID: 0412085-005B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed	l
Total Petroleum Hydrocarbons	SW80)15M (SW	/3580A)	Prep	Date: 12/	/7/2004 Analyst: JF	:
TPH (Gasoline)	ND	23	* n	ng/Kg-dry	1	12/9/2004	
TPH (Diesel)	ND	23	* n	ng/Kg-dry	1	12/9/2004	
TPH (Oil)	25	23	* n	ng/Kg-dry	1	12/9/2004	
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550B) Prep	Date: 12/	/7/2004 Analyst: VS	;
Acenaphthene	ND	0.029	m	ng/Kg-dry	1	12/9/2004	
Acenaphthylene	ND	0.029	m	ng/Kg-dry	1	12/9/2004	
Anthracene	ND	0.029	n	ng/Kg-dry	1	12/9/2004	
Benz(a)anthracene	ND	0.029	n	ng/Kg-dry	1	12/9/2004	
Benzo(b)fluoranthene	ND	0.029	n	ng/Kg-dry	1	12/9/2004	
Benzo(k)fluoranthene	ND	0.029	n	ng/Kg-dry	1	12/9/2004	
Benzo(g,h,i)perylene	ND	0.029	m	ng/Kg-dry	1	12/9/2004	
Benzo(a)pyrene	ND	0.029	m	ng/Kg-dry	1	12/9/2004	
Chrysene	0.029	0.029	m	ng/Kg-dry	1	12/9/2004	
Dibenz(a,h)anthracene	ND	0.029	n	ng/Kg-dry	1	12/9/2004	
Fluoranthene	0.029	0.029	m	ng/Kg-dry	1	12/9/2004	
Fluorene	ND	0.029	m	ng/Kg-dry	1	12/9/2004	
Indeno(1,2,3-cd)pyrene	ND	0.029	m	ng/Kg-dry	1	12/9/2004	
Naphthalene	0.087	0.029	m	ng/Kg-dry	1	12/9/2004	
Phenanthrene	0.089	0.029	m	ng/Kg-dry	1	12/9/2004	
Pyrene	0.05	0.029	m	ng/Kg-dry	1	12/9/2004	
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW	3550B)	Prep	Date: 12/	/7/2004 Analyst: PA	В
Bis(2-chloroethoxy)methane	ND	0.39		ng/Kg-dry	1	12/10/2004	
Bis(2-chloroethyl)ether	ND	0.39	m	ng/Kg-dry	1	12/10/2004	
Bis(2-ethylhexyl)phthalate	ND	0.39	m	ng/Kg-dry	1	12/10/2004	
4-Bromophenyl phenyl ether	ND	0.39	m	ng/Kg-dry	1	12/10/2004	
Butyl benzyl phthalate	ND	0.39	n	ng/Kg-dry	1	12/10/2004	
Carbazole	ND	0.39		ng/Kg-dry	1	12/10/2004	
4-Chloro-3-methylphenol	ND	0.39		ng/Kg-dry	1	12/10/2004	
4-Chloroaniline	ND	0.39	m	ng/Kg-dry	1	12/10/2004	
2-Chloronaphthalene	ND	0.39		ng/Kg-dry	1	12/10/2004	
2-Chlorophenol	ND	0.39		ng/Kg-dry	1	12/10/2004	
4-Chlorophenyl phenyl ether	ND	0.39		ng/Kg-dry	1	12/10/2004	
Dibenzofuran	ND	0.39		ng/Kg-dry	1	12/10/2004	
1,2-Dichlorobenzene	ND	0.39		ng/Kg-dry	1	12/10/2004	
1,3-Dichlorobenzene	ND	0.39		ng/Kg-dry	1	12/10/2004	
1,4-Dichlorobenzene	ND	0.39		ng/Kg-dry	1	12/10/2004	
3,3´-Dichlorobenzidine	ND	0.78		ng/Kg-dry	1	12/10/2004	

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB59-001

Lab Order: 0412085 **Tag Number:** 8-10'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/3/2004 12:10:00 PM

Lab ID: 0412085-005B **Matrix:** Soil

Analyses	Result	RL Qu	alifier Units	DF 1	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW355	0B) Prep	Date: 12/7/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.39	mg/Kg-dry	1	12/10/2004
Diethyl phthalate	ND	0.39	mg/Kg-dry	1	12/10/2004
Dimethyl phthalate	ND	0.39	mg/Kg-dry	1	12/10/2004
Di-n-butyl phthalate	ND	0.39	mg/Kg-dry	1	12/10/2004
2,4-Dimethylphenol	ND	0.39	mg/Kg-dry	1	12/10/2004
4,6-Dinitro-2-methylphenol	ND	1.9	mg/Kg-dry	1	12/10/2004
2,4-Dinitrophenol	ND	1.9	mg/Kg-dry	1	12/10/2004
2,4-Dinitrotoluene	ND	0.2	mg/Kg-dry	1	12/10/2004
2,6-Dinitrotoluene	ND	0.2	mg/Kg-dry	1	12/10/2004
Di-n-octyl phthalate	ND	0.39	mg/Kg-dry	1	12/10/2004
Hexachlorobenzene	ND	0.39	mg/Kg-dry	1	12/10/2004
Hexachlorobutadiene	ND	0.39	mg/Kg-dry	1	12/10/2004
Hexachlorocyclopentadiene	ND	0.39	mg/Kg-dry	1	12/10/2004
Hexachloroethane	ND	0.39	mg/Kg-dry	1	12/10/2004
Isophorone	ND	0.39	mg/Kg-dry	1	12/10/2004
2-Methylnaphthalene	ND	0.39	mg/Kg-dry	1	12/10/2004
2-Methylphenol	ND	0.39	mg/Kg-dry	1	12/10/2004
4-Methylphenol	ND	0.39	mg/Kg-dry	1	12/10/2004
2-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/10/2004
3-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/10/2004
4-Nitroaniline	ND	1.9	mg/Kg-dry	1	12/10/2004
Nitrobenzene	ND	0.2	mg/Kg-dry	1	12/10/2004
2-Nitrophenol	ND	0.39	mg/Kg-dry	1	12/10/2004
4-Nitrophenol	ND	1.9	mg/Kg-dry	1	12/10/2004
N-Nitrosodi-n-propylamine	ND	0.2	mg/Kg-dry	1	12/10/2004
N-Nitrosodiphenylamine	ND	0.39	mg/Kg-dry	1	12/10/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.39	mg/Kg-dry	1	12/10/2004
Pentachlorophenol	ND	1.9	mg/Kg-dry	1	12/10/2004
Phenol	ND	0.39	mg/Kg-dry	1	12/10/2004
1,2,4-Trichlorobenzene	ND	0.39	mg/Kg-dry	1	12/10/2004
2,4,5-Trichlorophenol	ND	0.78	mg/Kg-dry	1	12/10/2004
2,4,6-Trichlorophenol	ND	0.39	mg/Kg-dry	1	12/10/2004
Percent Moisture	D2974	l	Prep	Date: 12/6/2004	Analyst: ASM
Percent Moisture	15.67	0.01	* wt%	1	12/7/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

H - Holding time exceeded Page

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2201 West Campbell Park Drive Chicago, IL 60612-3547
Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB59-002

Lab Order: 0412085 **Tag Number:** 16-18'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/3/2004 12:25:00 PM

Lab ID: 0412085-006A **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	SW50	035/8260E	}	Prep	Date: 12/4/2004	Analyst: PS
Acetone	ND	0.033	n	ng/Kg-dry	1	12/9/2004
Benzene	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
Bromodichloromethane	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
Bromoform	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
Bromomethane	ND	0.013	n	ng/Kg-dry	1	12/9/2004
2-Butanone	ND	0.013	n	ng/Kg-dry	1	12/9/2004
Carbon disulfide	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
Carbon tetrachloride	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
Chlorobenzene	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
Chloroethane	ND	0.013	n	ng/Kg-dry	1	12/9/2004
Chloroform	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
Chloromethane	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
Dibromochloromethane	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
1,1-Dichloroethane	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
1,2-Dichloroethane	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
1,1-Dichloroethene	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
cis-1,2-Dichloroethene	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
trans-1,2-Dichloroethene	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
1,2-Dichloropropane	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
cis-1,3-Dichloropropene	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
trans-1,3-Dichloropropene	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
Ethylbenzene	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
2-Hexanone	ND	0.013	n	ng/Kg-dry	1	12/9/2004
4-Methyl-2-pentanone	ND	0.013	n	ng/Kg-dry	1	12/9/2004
Methylene chloride	0.016	0.013	B n	ng/Kg-dry	1	12/9/2004
Methyl tert-butyl ether	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
Styrene	ND	0.0067	n	ng/Kg-dry	1	12/9/2004
1,1,2,2-Tetrachloroethane	ND	0.0067		ng/Kg-dry	1	12/9/2004
Tetrachloroethene	ND	0.0067		ng/Kg-dry	1	12/9/2004
Toluene	ND	0.0067		ng/Kg-dry	1	12/9/2004
1,1,1-Trichloroethane	ND	0.0067		ng/Kg-dry	1	12/9/2004
1,1,2-Trichloroethane	ND	0.0067		ng/Kg-dry	1	12/9/2004
Trichloroethene	ND	0.0067		ng/Kg-dry	1	12/9/2004
Vinyl chloride	ND	0.0067		ng/Kg-dry	1	12/9/2004
Xylenes, Total	ND	0.013		ng/Kg-dry	1	12/9/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

K - KI D outside accepted recovery mint

E - Value above quantitation range H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB59-002

Lab Order: 0412085 **Tag Number:** 16-18'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/3/2004 12:25:00 PM

Lab ID: 0412085-006B **Matrix:** Soil

Analyses	Result	RL	Qualifier	Units	DF I	Date Analyzed
Total Petroleum Hydrocarbons	SW80)15M (SW	/3580A)	Prep	Date: 12/7/2004	Analyst: JF
TPH (Gasoline)	ND	22	*	mg/Kg-dry	1	12/9/2004
TPH (Diesel)	ND	22	*	mg/Kg-dry	1	12/9/2004
TPH (Oil)	ND	22	*	mg/Kg-dry	1	12/9/2004
Polynuclear Aromatic Hydrocarbons	SW82	70C-SIM	(SW3550E	B) Prep	Date: 12/7/2004	Analyst: VS
Acenaphthene	ND	0.028		mg/Kg-dry	1	12/8/2004
Acenaphthylene	ND	0.028		mg/Kg-dry	1	12/8/2004
Anthracene	ND	0.028		mg/Kg-dry	1	12/8/2004
Benz(a)anthracene	ND	0.028		mg/Kg-dry	1	12/8/2004
Benzo(b)fluoranthene	ND	0.028		mg/Kg-dry	1	12/8/2004
Benzo(k)fluoranthene	ND	0.028		mg/Kg-dry	1	12/8/2004
Benzo(g,h,i)perylene	ND	0.028		mg/Kg-dry	1	12/8/2004
Benzo(a)pyrene	ND	0.028		mg/Kg-dry	1	12/8/2004
Chrysene	ND	0.028		mg/Kg-dry	1	12/8/2004
Dibenz(a,h)anthracene	ND	0.028		mg/Kg-dry	1	12/8/2004
Fluoranthene	ND	0.028		mg/Kg-dry	1	12/8/2004
Fluorene	ND	0.028		mg/Kg-dry	1	12/8/2004
Indeno(1,2,3-cd)pyrene	ND	0.028		mg/Kg-dry	1	12/8/2004
Naphthalene	ND	0.028		mg/Kg-dry	1	12/8/2004
Phenanthrene	0.075	0.028		mg/Kg-dry	1	12/8/2004
Pyrene	ND	0.028		mg/Kg-dry	1	12/8/2004
Semivolatile Organic Compounds by GC/MS	SW82	270C (SW	(3550B)	Prep	Date: 12/7/2004	Analyst: PAB
Bis(2-chloroethoxy)methane	ND	0.38		mg/Kg-dry	1	12/9/2004
Bis(2-chloroethyl)ether	ND	0.38		mg/Kg-dry	1	12/9/2004
Bis(2-ethylhexyl)phthalate	ND	0.38		mg/Kg-dry	1	12/9/2004
4-Bromophenyl phenyl ether	ND	0.38		mg/Kg-dry	1	12/9/2004
Butyl benzyl phthalate	ND	0.38		mg/Kg-dry	1	12/9/2004
Carbazole	ND	0.38		mg/Kg-dry	1	12/9/2004
4-Chloro-3-methylphenol	ND	0.38		mg/Kg-dry	1	12/9/2004
4-Chloroaniline	ND	0.38		mg/Kg-dry	1	12/9/2004
2-Chloronaphthalene	ND	0.38		mg/Kg-dry	1	12/9/2004
2-Chlorophenol	ND	0.38		mg/Kg-dry	1	12/9/2004
4-Chlorophenyl phenyl ether	ND	0.38		mg/Kg-dry	1	12/9/2004
Dibenzofuran	ND	0.38		mg/Kg-dry	1	12/9/2004
1,2-Dichlorobenzene	ND	0.38		mg/Kg-dry	1	12/9/2004
1,3-Dichlorobenzene	ND	0.38		mg/Kg-dry	1	12/9/2004
1,4-Dichlorobenzene	ND	0.38		mg/Kg-dry	1	12/9/2004
3,3´-Dichlorobenzidine	ND	0.75		mg/Kg-dry	1	12/9/2004

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

Qualifiers:

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

K - KI D outside accepted recovery minus

E - Value above quantitation range

H - Holding time exceeded

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2201 West Campbell Park Drive Chicago, IL 60612-3547

Tel: (312) 563-0371 Fax: (312) 733-2386 STATinfo@STATAnalysis.com

Laboratory Accreditation Numbers: IEPA NELAP 100445; AIHA 10248; NVLAP 101202-0

Report Date: December 10, 2004 **Print Date:** December 15, 2004

Client: Burns & McDonnell Client Sample ID: WSS-SB59-002

Lab Order: 0412085 **Tag Number:** 16-18'

Project: 32088, Willow Street Station- General Iron Collection Date: 12/3/2004 12:25:00 PM

Lab ID: 0412085-006B **Matrix:** Soil

Analyses	Result	RL Q	ualifier Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	SW82	70C (SW35	50B) Prep	Date: 12/7/2004	Analyst: PAB
2,4-Dichlorophenol	ND	0.38	mg/Kg-dry	1	12/9/2004
Diethyl phthalate	ND	0.38	mg/Kg-dry	1	12/9/2004
Dimethyl phthalate	ND	0.38	mg/Kg-dry	1	12/9/2004
Di-n-butyl phthalate	ND	0.38	mg/Kg-dry	1	12/9/2004
2,4-Dimethylphenol	ND	0.38	mg/Kg-dry	1	12/9/2004
4,6-Dinitro-2-methylphenol	ND	1.8	mg/Kg-dry	1	12/9/2004
2,4-Dinitrophenol	ND	1.8	mg/Kg-dry	1	12/9/2004
2,4-Dinitrotoluene	ND	0.19	mg/Kg-dry	1	12/9/2004
2,6-Dinitrotoluene	ND	0.19	mg/Kg-dry	1	12/9/2004
Di-n-octyl phthalate	ND	0.38	mg/Kg-dry	1	12/9/2004
Hexachlorobenzene	ND	0.38	mg/Kg-dry	1	12/9/2004
Hexachlorobutadiene	ND	0.38	mg/Kg-dry	1	12/9/2004
Hexachlorocyclopentadiene	ND	0.38	mg/Kg-dry	1	12/9/2004
Hexachloroethane	ND	0.38	mg/Kg-dry	1	12/9/2004
Isophorone	ND	0.38	mg/Kg-dry	1	12/9/2004
2-Methylnaphthalene	ND	0.38	mg/Kg-dry	1	12/9/2004
2-Methylphenol	ND	0.38	mg/Kg-dry	1	12/9/2004
4-Methylphenol	ND	0.38	mg/Kg-dry	1	12/9/2004
2-Nitroaniline	ND	1.8	mg/Kg-dry	1	12/9/2004
3-Nitroaniline	ND	1.8	mg/Kg-dry	1	12/9/2004
4-Nitroaniline	ND	1.8	mg/Kg-dry	1	12/9/2004
Nitrobenzene	ND	0.19	mg/Kg-dry	1	12/9/2004
2-Nitrophenol	ND	0.38	mg/Kg-dry	1	12/9/2004
4-Nitrophenol	ND	1.8	mg/Kg-dry	1	12/9/2004
N-Nitrosodi-n-propylamine	ND	0.19	mg/Kg-dry	1	12/9/2004
N-Nitrosodiphenylamine	ND	0.38	mg/Kg-dry	1	12/9/2004
2, 2'-oxybis(1-Chloropropane)	ND	0.38	mg/Kg-dry	1	12/9/2004
Pentachlorophenol	ND	1.8	mg/Kg-dry	1	12/9/2004
Phenol	ND	0.38	mg/Kg-dry	1	12/9/2004
1,2,4-Trichlorobenzene	ND	0.38	mg/Kg-dry	1	12/9/2004
2,4,5-Trichlorophenol	ND	0.75	mg/Kg-dry	1	12/9/2004
2,4,6-Trichlorophenol	ND	0.38	mg/Kg-dry	1	12/9/2004
Percent Moisture	D2974	ļ	Prep	Date: 12/6/2004	Analyst: ASM
Percent Moisture	13.17	0.01	* wt%	1	12/7/2004

ND - Not Detected at the Reporting Limit

Qualifiers: J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

HT - Sample received past holding time

* - Non-accredited parameter

RL - Reporting / Quantitation Limit for the analysis

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

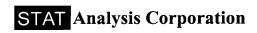
K - KI D outside accepted recovery film

E - Value above quantitation range

H - Holding time exceeded

Page 15 of 15

Burns & State 1898	Request for Chemical Analysis and Chain of Custody Record	
Burns & McDonnell Engineering 2601 W. 22nd St Oak Brook, Illinois 60523 Phone: (630) 990-0301 Attention: Digne Saffic Sample Number: 32 088 Site Name: Willow Shreet Shakon - Genera Sample Number Sample Number Sample Number Sample Number Sample Sample NUSS SB53 COI 1 2004 WSS SB53 COI 1 2004 WSS SB53 COI 1 2004 WSS SB53 COI 1 2004 WSS SB53 COI 1 2004 WSS SB53 COI 1 2004 WSS SB53 COI 1 2004	5TAT OI Mest Campbell Park 12) 563-0371 Sample Depth Sample Time Sample Type From To Date Time of Gas If 16 12364 0825 X (a 18 12364 1225 X (a 18 12364 1225 X (a -3 -4)	Document Control No: W.SS-OD5-2004 Lab. Reference No. or Episode No:: OU 12085 Lab. Reference No. or Episode No:: OU 12085 A X X X Remarks A X X X R RID = 0.0 ppm CU A X X X R R RID = 0.0 ppm CU A X X X R R RID = 0.0 ppm CU A X X X R R RID = 0.0 ppm CU A X X X R R RID = 0.0 ppm CU A X X X R R RID = 0.0 ppm CU A X X X R R RID = 0.0 ppm CU A X X X R R R R R R R R R R R R R R R R
impler (signature): elinquished By (signature): elinquished By (signature):	Sampler (signature): Custody Seal Number Special Instruction W\$5-005-2004-001 W\$5-005-2004-002 W\$5-005-2004-002 W\$5-005-2004-002 W\$5-005-2004-002 W\$5-005-2004-002 W\$5-005-2004-002 W\$5-005-2004-002 W\$5-005-2004-002 W\$5-005-2004-002 W\$5-005-2004-002 W\$5-005-2004-002 W\$5-005-2004-002 Date/Time Received By (signature): Date/Time Laboratory Co	Special Instructions: Cookerage Cooke
્રાં	-	061301 Form WCD-KC1-CH



Sample Receipt Checklist

Client Name B&M			Date and Time Received:		12/3/2004
Work Order Numbe 0412085			Received by:	CDF	
Checklist completed by: Signature	Date	13/04	Reviewed by:	Initials	1210log Date
Matrix:	Carrier name	Client Delivered			
Shipping container/cooler in good condition?		Yes 🗸	No 🗌	Not Present	
Custody seals intact on shippping container/o	cooler?	Yes 🗸	No 🗌	Not Present	
Custody seals intact on sample bottles?		Yes	No 🗌	Not Present	2
Chain of custody present?		Yes 🗸	No 🗌		
Chain of custody signed when relinquished at	nd received?	Yes 🗸	No \square		
Chain of custody agrees with sample labels?		Yes 🗸	No 🗌		
Samples in proper container/bottle?		Yes 🗸	No 🗌		
Sample containers intact?		Yes 🗸	No 🗌		
Sufficient sample volume for indicated test?		Yes 🗸	No 🗌		
All samples received within holding time?		Yes 🗸	No 🗌		
Container or Temp Blank temperature in com	pliance?	Yes 🗹	No 🗌	Tempera	ature 6 °C
Water - VOA vials have zero headspace?	No VOA vials subn	nitted	Yes 🗸	No 🗌	
Water - Samples properly preserved/ pH chec	cked?	Yes 🔳	No 💹		
	Adjusted?	Chec	cked by		
Any No and/or NA (not applicable) response	must be detailed in the c	omments section	below.	:===:	
Client contacted	Date contacted:		Perso	on contacted	
Contacted by:	Regarding:				
Comments:					
Corrective Action					
					<u></u>

CLIENT: Burns & McDonnell

Work Order: 0412085

Project: 32088, Willow Street Station- General Iron

Test No: SW5035/8260B Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Date: 15-Dec-04

Sample ID	BR4FBZ	BZMED8	DBFM	DCA12D4	
VBLK120804a-2	104	96.7	100	100	
VLCS120804A-2	100	99.2	104	104	
VLCSD120804A-2	102	97.7	106	109	
0412059-007AMS	88.3	95.8	104	102	
0412059-007AMSD	85.1	97.5	104	107	
0412059-008AMS	83.3	90.9	105	102	
0412059-008AMSD	85.9	87.6	99.8	105	
0412085-001A	94.4	98.0	103	102	
0412085-003A	74.5	78.9 *	97.0	118	
0412085-005A	89.3	94.1	103	106	
0412085-002A	82.4	93.7	108	106	
VBLK120904-2	104	96.1	105	97.2	
VLCS120904-2	103	100	108	106	
VLCSD120904-2	103	100	106	98.1	
0412085-002A:50	107	101	107	111	
0412085-003AR	76.0	81.0 *	100	104	
0412085-006A	85.9	87.3	101	109	

Acronym		Surrogate		QC Limits	
BR4FBZ BZMED8 DBFM DCA12D4	=	4-Bromofluo Toluene-d8 Dibromofluor 1,2-Dichloro	omethane	63-110 85-110 83-119 84-129	

^{*} Surrogate recovery outside acceptance limits

CLIENT: Burns & McDonnell

Work Order: 0412085

Project: 32088, Willow Street Station- General Iron

Test No: SW8270C Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Date: 15-Dec-04

Sample ID	CLPH2D4	DCBZ12D4	NO2BZD5	PH246BR	PH2F	PHD5	PHEN2F	PHEND14
MB-12127-SVOC	79.9	71.7	89.6	108	84.3	91.6	74.4	87.1
LCS-12127-SVOC	74.5	66.8	87.4	86.2	77.6	88.4	73.5	88.9
0412059-007BMS	66.9	61.3	81.9	129 *	59.8	77.0	80.7	95.7
0412059-007BMSD	67.1	62.4	80.1	109	62.0	74.6	76.6	86.3
0412059-008BMS	72.0	68.7	87.5	82.6	69.9	81.7	78.4	75.3
0412059-008BMSD	90.8	87.7	110	105	91.0	102	93.2	85.7
0412085-003B	66.0	61.0	83.5	65.1	65.2	82.7	72.5	87.3
0412085-006B	66.2	61.1	83.1	73.5	66.4	81.2	71.5	91.1
0412085-005B	73.8	66.4	92.4	85.8	74.6	89.5	73.4	86.1
0412085-001B	46.2	42.6	60.3	61.8	41.2	55.8	54.4	59.9
0412085-002B	65.2	63.2	83.9	73.0	58.4	74.2	102	146 *
0412085-002B:10	66.9	69.6	75.8	68.6	61.6	79.7	75.4	117

Acronym		Surrogate		QC Limits	
CLPH2D4 DCBZ12D4 NO2BZD5	=	2-Chlorophe 1,2-Dichloro Nitrobenzen	benzene-d4 e-d5	20-130 20-130 23-120	
PH246BR	=	2,4,6-Tribron	nophenol	19-122	
PH2F	=	2-Fluorophei	nol	25-121	
PHD5	=	Phenol-d5		24-113	
PHEN2F	=	2-Fluorobiph	enyl	30-115	
PHEND14	=	4-Terphenyl-	-d14	18-137	

^{*} Surrogate recovery outside acceptance limits

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 12/7/2004 12:30:55

Prep End Date:

Prep Factor Units:

Prep Batch 12127 Prep Code: 3550_SVOC Technician: JT mL/Kg

Sample ID	Matrix	pH SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0412059-001B	Soil	0.03032	0	0	1	32.982	12/7/2004	12/7/2004
0412059-002B	Soil	0.030035	0	0	1	33.294	12/7/2004	12/7/2004
0412059-003B	Soil	0.030067	0	0	1	33.259	12/7/2004	12/7/2004
0412059-004B	Soil	0.03038	0	0	1	32.916	12/7/2004	12/7/2004
0412059-005B	Soil	0.03026	0	0	1	33.047	12/7/2004	12/7/2004
0412059-006B	Soil	0.03025	0	0	1	33.058	12/7/2004	12/7/2004
0412059-007B	Soil	0.03031	0	0	1	32.992	12/7/2004	12/7/2004
0412059-007BMS	Soil	0.03029	0	0	1	33.014	12/7/2004	12/7/2004
0412059-007BMSD	Soil	0.03028	0	0	1	33.025	12/7/2004	12/7/2004
0412059-008B	Soil	0.03033	0	0	1	32.971	12/7/2004	12/7/2004
0412059-008BMS	Soil	0.03039	0	0	1	32.906	12/7/2004	12/7/2004
0412059-008BMSD	Soil	0.03075	0	0	1	32.520	12/7/2004	12/7/2004
0412059-009B	Soil	0.03081	0	0	1	32.457	12/7/2004	12/7/2004
0412059-010B	Soil	0.03081	0	0	1	32.457	12/7/2004	12/7/2004
0412085-001B	Soil	0.0307	0	0	1	32.573	12/7/2004	12/8/2004
0412085-002B	Soil	0.03072	0	0	1	32.552	12/7/2004	12/8/2004
0412085-003B	Soil	0.03044	0	0	1	32.852	12/7/2004	12/8/2004
0412085-005B	Soil	0.03018	0	0	1	33.135	12/7/2004	12/8/2004
0412085-006B	Soil	0.03036	0	0	1	32.938	12/7/2004	12/8/2004
0412099-001B	Soil	0.03058	0	0	1	32.701	12/7/2004	12/8/2004
0412099-002B	Soil	0.03032	0	0	1	32.982	12/7/2004	12/8/2004
0412099-003B	Soil	0.03073	0	0	1	32.541	12/7/2004	12/8/2004
0412130-003A	Soil	0.0307	0	0	1	32.573	12/7/2004	12/8/2004
LCS-12127-SVOC		0.03	0	0	1	33.333	12/7/2004	12/7/2004
MB-12127-SVOC		0.03	0	0	1	33.333	12/7/2004	12/7/2004

CLIENT: Burns & McDonnell

Work Order: 0412085

Project: 32088, Willow Street Station- General Iron

Test No: SW8270C-SIM Matrix: S

QC SUMMARY REPORT SURROGATE RECOVERIES

Date: 15-Dec-04

Sample ID	DCBZ12D4	NO2BZD5	PHEN2F	PHEND14	
0412059-007BMS	72.3	96.4	81.2	126	
0412059-007BMSD	62.7	83.8	73.1	133	
MB-12126-PNA	82.2	92.6	78.2	88.2	
LCS-12126-PNA	75.6	85.4	73.1	83.6	
0412059-008BMS	65.9	83.2	74.1	85.4	
0412059-008BMSD	68.3	88.8	73.3	87.2	
0412085-003B	63.7	80.3	54.8	62.7	
0412085-006B	60.1	74.4	53.4	62.3	
0412085-005B	57.4	72.0	51.7	55.9	
0412085-001B	61.8	81.6	61.2	67.9	
0412085-002B	61.0	79.1	101	57.8	

Acronym	Surrogate	QC Limits
DCBZ12D4	= 1,2-Dichlorobenzene-d4	20-130
NO2BZD5	= Nitrobenzene-d5	23-120
PHEN2F	= 2-Fluorobiphenyl	30-115
PHEND14	= 4-Terphenyl-d14	18-137

^{*} Surrogate recovery outside acceptance limits

PREP BATCH REPORT

Page: 1 of 2

Prep Start Date: 12/7/2004 12:27:03
Prep End Date: 12/8/2004 9:59:21 P

Prep Factor Units:

Prep Batch 12126 Prep Code: 3550_PNA Technician: JT mL/Kg

Sample ID	Matrix	pH Sar	mpAmt	Sol Added	Sol Recov		Fin Vol	factor	PrepStart	PrepEnd
0412058-001B	Soil	(0.03068	0	0)	1	32.595	12/7/2004	12/7/2004
0412058-002B	Soil		0.03087	0	0)	1	32.394	12/7/2004	12/7/2004
0412058-003B	Soil	I	0.03064	0	0)	1	32.637	12/7/2004	12/7/2004
0412059-001B	Soil	1	0.03032	0	0)	1	32.982	12/7/2004	12/7/2004
0412059-002B	Soil	I	0.03035	0	0)	1	32.949	12/7/2004	12/7/2004
0412059-003B	Soil	I	0.03067	0	0)	1	32.605	12/7/2004	12/7/2004
0412059-004B	Soil	I	0.03038	0	0)	1	32.916	12/7/2004	12/7/2004
0412059-005B	Soil	I	0.03026	0	0)	1	33.047	12/7/2004	12/7/2004
0412059-006B	Soil	I	0.03025	0	0)	1	33.058	12/7/2004	12/7/2004
0412059-007B	Soil	I	0.03031	0	0)	1	32.992	12/7/2004	12/7/2004
0412059-007BMS	Soil	I	0.03031	0	0)	1	32.992	12/7/2004	12/7/2004
0412059-007BMSD	Soil	I	0.03047	0	0)	1	32.819	12/7/2004	12/7/2004
0412059-008B	Soil	I	0.03033	0	0)	1	32.971	12/7/2004	12/7/2004
0412059-008BMS	Soil	I	0.03039	0	0)	1	32.906	12/7/2004	12/7/2004
0412059-008BMSD	Soil		0.0305	0	0)	1	32.787	12/7/2004	12/7/2004
0412059-009B	Soil	I	0.03081	0	0)	1	32.457	12/7/2004	12/7/2004
0412059-010B	Soil	I	0.03081	0	0)	1	32.457	12/7/2004	12/7/2004
0412085-001B	Soil		0.0307	0	0)	1	32.573	12/7/2004	12/8/2004
0412085-002B	Soil	I	0.03072	0	0)	1	32.552	12/7/2004	12/8/2004
0412085-003B	Soil	-	0.03044	0	0)	1	32.852	12/7/2004	12/8/2004
0412085-005B	Soil	-	0.03018	0	0)	1	33.135	12/7/2004	12/8/2004
0412085-006B	Soil	-	0.03036	0	0)	1	32.938	12/7/2004	12/8/2004
0412086-001A	Soil		0.03052	0	0		1	32.765	12/7/2004	12/8/2004
0412130-003A	Soil		0.0307	0	0		1	32.573	12/7/2004	12/8/2004
LCS-12126-PNA			0.03	0	0)	1	33.333	12/7/2004	12/7/2004

PREP BATCH REPORT

Page: 2 of 2

Prep Start Date: 12/7/2004 12:27:03
Prep End Date: 12/8/2004 9:59:21 P

Prep Factor Units:

Prep Batch 12126 Prep Code: 3550_PNA Technician: JT mL/Kg

Sample ID	Matrix	рН	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
MB-12126-PNA			0.03	0	0	1	33.333	12/7/2004	12/7/2004

PREP BATCH REPORT

Page: 1 of 1

Prep Start Date: 12/7/2004 8:14:46 P

Prep End Date:

Prep Factor Units:

Prep Batch 12138 Prep Code: 3580_TPH Technician: CDC mL/Kg

Sample ID	Matrix	pH SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
0412059-001B	Soil	0.00525	0	0	5	952.381	12/7/2004	12/8/2004
0412059-002B	Soil	0.00504	0	0	5	992.063	12/7/2004	12/8/2004
0412059-003B	Soil	0.00517	0	0	5	967.118	12/7/2004	12/8/2004
0412059-004B	Soil	0.00557	0	0	5	897.666	12/7/2004	12/8/2004
0412059-005B	Soil	0.00525	0	0	5	952.381	12/7/2004	12/8/2004
0412059-006B	Soil	0.00546	0	0	5	915.751	12/7/2004	12/8/2004
0412059-007B	Soil	0.00532	0	0	5	939.850	12/7/2004	12/8/2004
0412059-007BMS	Soil	0.00523	0	0	5	956.023	12/7/2004	12/8/2004
0412059-007BMSD	Soil	0.00509	0	0	5	982.318	12/7/2004	12/8/2004
0412059-008B	Soil	0.00536	0	0	5	932.836	12/7/2004	12/8/2004
0412059-008BMS	Soil	0.00506	0	0	5	988.142	12/7/2004	12/8/2004
0412059-008BMSD	Soil	0.00509	0	0	5	982.318	12/7/2004	12/8/2004
0412059-009B	Soil	0.00513	0	0	5	974.659	12/7/2004	12/8/2004
0412059-010B	Soil	0.00591	0	0	5	846.024	12/7/2004	12/8/2004
0412085-001B	Soil	0.00559	0	0	5	894.454	12/7/2004	12/8/2004
0412085-002B	Soil	0.00529	0	0	5	945.180	12/7/2004	12/8/2004
0412085-003B	Soil	0.00552	0	0	5	905.797	12/7/2004	12/8/2004
0412085-005B	Soil	0.00521	0	0	5	959.693	12/7/2004	12/8/2004
0412085-006B	Soil	0.00524	0	0	5	954.198	12/7/2004	12/8/2004
_CS-12138-TPH		0.005	0	0	5	1000.000	12/7/2004	12/8/2004
/IB-12138-TPH		0.005	0	0	5	1000.000	12/7/2004	12/8/2004

Date: *December 15, 2004*

CLIENT: Burns & McDonnell

Work Order: 0412085

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12138

Sample ID MB-12138-TPH	SampType:	MBLK	TestCod	le: TPH	Units: mg/Kg		Prep Date:	12/7/20	004	Run ID: G	C-FID_04120	8A
Client ID: ZZZZZ	Batch ID:	12138	TestN	o: SW8015N	1		Analysis Date	12/8/20	004	SeqNo: 32	20353	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit F	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		ND	20									*
TPH (Diesel)		ND	20									*
TPH (Oil)		ND	20									*
Sample ID LCS-12138-TPH	SampType:	LCS	TestCoo	le: TPH	Units: mg/Kg		Prep Date:	12/7/20	004	Run ID: G	C-FID_04120	8A
Client ID: ZZZZZ	Batch ID:	12138	TestN	o: SW8015N	1		Analysis Date	: 12/8/20	004	SeqNo: 32	20354	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit F	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		139.4	20	200	0	69.7	30	150	0	0		*
TPH (Diesel)		217.4	20	200	0	109	30	150	0	0		*
TPH (Oil)		299.9	20	200	0	150	30	150	0	0		*
Sample ID 0412059-007BMS	SampType:	MS	TestCoo	le: TPH	Units: mg/Kg	-dry	Prep Date:	12/7/20	004	Run ID: G	C-FID_04120	8A
Client ID: ZZZZZ	Batch ID:	12138	TestN	o: SW8015N	1		Analysis Date	12/9/20	004	SeqNo: 32	20362	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit F	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)		228.7	32	317.2	0	72.1	30	150	0	0		*
TPH (Diesel)		874	32	317.2	302	180	30	150	0	0		S*
TPH (Oil)		2083	32	317.2	1099	310	30	150	0	0		S*
Sample ID 0412059-008BMS	SampType:	MS	TestCoo	le: TPH	Units: mg/Kg	-dry	Prep Date:	12/7/20	004	Run ID: G	C-FID_04120	8A
			T (1)	o: SW8015N	1		Analysis Date	12/9/20	004	SeqNo: 32	20365	
Client ID: ZZZZZ	Batch ID:	12138	Testin	O. 344601314	!		Allalysis Date	,,,_,				
Client ID: ZZZZZ Analyte		12138 Result	PQL	SPK value	SPK Ref Val	%REC	,		RPD Ref Val	%RPD	RPDLimit	Qual
							,		RPD Ref Val	%RPD 0	RPDLimit	Qual
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit F	HighLimit			RPDLimit	Qual * *

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

* - Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Page 1 of 25

Work Order:

Project:

0412085 32088, Willow Street Station-General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12138

Sample ID 0412059-007BMSD	SampType: MSD	TestCoo	de: TPH	Units: mg/l	Kg-dry	Prep Dat	te: 12/7/2	004	Run ID: GC	C-FID_04120	ВА
Client ID: ZZZZZ	Batch ID: 12138	TestN	lo: SW8015N	I		Analysis Da	te: 12/9/2	004	SeqNo: 32	0363	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	293.2	33	326	0	89.9	30	150	228.7	24.7	25	*
TPH (Diesel)	1474	33	326	302	360	30	150	874	51.1	25	SR*
TPH (Oil)	3292	33	326	1099	673	30	150	2083	45.0	25	SR*
Sample ID 0412059-008BMSD	SampType: MSD	TestCoo	de: TPH	Units: mg/l	Kg-dry	Prep Dat	te: 12/7/2	004	Run ID: GC	C-FID_04120	ВА
Client ID: ZZZZZ	Batch ID: 12138	TestN	lo: SW8015N	1		Analysis Da	te: 12/9/2	004	SeqNo: 32	0366	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	182.8	25	246.4	0	74.2	30	150	174	4.95	25	*
TPH (Diesel)	330.7	25	246.4	5.454	132	30	150	296.8	10.8	25	*
TPH (Oil)	434	25	246.4	24.72	166	30	150	396.2	9.11	25	S*

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

Work Order:

0412085

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12126

Sample ID MB-12126-PNA	SampType: MBLK	TestCod	de: PNA_SOIL	Units: mg/Kg		Prep Date	e: 12/7/2 0	004	Run ID: SV	OC-4_0412	07A
Client ID: ZZZZZ	Batch ID: 12126	TestN	lo: SW8270C -	SI		Analysis Dat	e: 12/7/2 0	004	SeqNo: 319	9326	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.025	0	0	0	0	0	0	0		
Acenaphthylene	ND	0.025	0	0	0	0	0	0	0		
Anthracene	ND	0.025	0	0	0	0	0	0	0		
Benz(a)anthracene	ND	0.025	0	0	0	0	0	0	0		
Benzo(a)pyrene	ND	0.025	0	0	0	0	0	0	0		
Benzo(b)fluoranthene	ND	0.025	0	0	0	0	0	0	0		
Benzo(g,h,i)perylene	ND	0.025	0	0	0	0	0	0	0		
Benzo(k)fluoranthene	ND	0.025	0	0	0	0	0	0	0		
Chrysene	ND	0.025	0	0	0	0	0	0	0		
Dibenz(a,h)anthracene	ND	0.025	0	0	0	0	0	0	0		
Fluoranthene	ND	0.025	0	0	0	0	0	0	0		
Fluorene	ND	0.025	0	0	0	0	0	0	0		
Indeno(1,2,3-cd)pyrene	ND	0.025	0	0	0	0	0	0	0		
Naphthalene	ND	0.025	0	0	0	0	0	0	0		
Phenanthrene	ND	0.025	0	0	0	0	0	0	0		
Pyrene	ND	0.025	0	0	0	0	0	0	0		
Sample ID LCS-12126-PNA	SampType: LCS	TestCod	de: PNA_SOIL	Units: mg/Kg		Prep Date	e: 12/7/2 0	004	Run ID: SV	OC-4_0412	07A
Client ID: ZZZZZ	Batch ID: 12126	TestN	lo: SW8270C-	SI		Analysis Dat	e: 12/7/2 0	004	SeqNo: 319	9327	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.1207	0.025	0.167	0	72.3	30	130	0	0		
Acenaphthylene	0.1253	0.025	0.167	0	75	30	130	0	0		
Anthracene	0.1293	0.025	0.167	0	77.4	30	130	0	0		
Benz(a)anthracene	0.1287	0.025	0.167	0	77	30	130	0	0		
Benzo(a)pyrene	0.1397	0.025	0.167	0	83.6	30	130	0	0		
Benzo(b)fluoranthene	0.1317	0.025	0.167	0	78.8	30	130	0	0		
Benzo(g,h,i)perylene	0.1323	0.025	0.167	0	79.2	30	130	0	0		
Benzo(k)fluoranthene	0.1477	0.025	0.167	0	88.4	30	130	0	0		
Chrysene	0.1437	0.025	0.167	0	86	30	130	0	0		
Dibenz(a,h)anthracene	0.1373	0.025	0.167	0	82.2	30	130	0	0		

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order:

0412085

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12126

Sample ID LCS-12126-P	NA SampType	: LCS	TestCode	e: PNA_SOII	_ Units: mg/Kg	ļ	Prep Date	e: 12/7/2 0	004	Run ID: S\	/OC-4_04120	07A
Client ID: ZZZZZ	Batch ID:	12126	TestNo	: SW8270C	-SI		Analysis Dat	e: 12/7/2 0	004	SeqNo: 31	9327	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoranthene		0.1313	0.025	0.167	0	78.6	30	130	0	0		
Fluorene		0.125	0.025	0.167	0	74.9	30	130	0	0		
Indeno(1,2,3-cd)pyrene		0.1353	0.025	0.167	0	81	30	130	0	0		
Naphthalene		0.1113	0.025	0.167	0	66.7	30	130	0	0		
Phenanthrene		0.1157	0.025	0.167	0	69.3	30	130	0	0		
Pyrene		0.1253	0.025	0.167	0	75	30	130	0	0		
Sample ID 0412059-008	BMS SampType	: MS	TestCode	e: PNA_SOI	L -B Units: mg/K ç	j-dry	Prep Date	e: 12/7/2 0	004	Run ID: S\	/OC-4_04120	07A
Client ID: ZZZZZ	Batch ID:	12126	TestNo	: SW8270C	-SI		Analysis Dat	e: 12/7/2 0	004	SeqNo: 31	9331	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene		0.2455	0.031	0.2067	0.07153	84.2	30	130	0	0		
Acenaphthylene		0.1882	0.031	0.2067	0.01364	84.4	30	130	0	0		
Anthracene		0.2897	0.031	0.2067	0.07856	102	30	130	0	0		
Benz(a)anthracene		0.2592	0.031	0.2067	0.06492	93.9	30	130	0	0		
Benzo(b)fluoranthene		0.2327	0.031	0.2067	0.03845	94	30	130	0	0		
Benzo(k)fluoranthene		0.2389	0.031	0.2067	0.03845	97	30	130	0	0		
Benzo(g,h,i)perylene		0.1762	0.031	0.2067	0.02522	73	30	130	0	0		
Benzo(a)pyrene		0.2794	0.031	0.2067	0.05871	107	30	130	0	0		
Chrysene		0.2827	0.031	0.2067	0.06119	107	30	130	0	0		
Dibenz(a,h)anthracene		0.17	0.031	0.2067	0.007856	78.4	30	130	0	0		
Fluoranthene		0.3697	0.031	0.2067	0.1398	111	30	130	0	0		
Fluorene		0.2592	0.031	0.2067	0.08807	82.8	30	130	0	0		
Indeno(1,2,3-cd)pyrene		0.1816	0.031	0.2067	0.02398	76.2	30	130	0	0		
Naphthalene		0.6978	0.031	0.2067	0.3887	150	30	130	0	0		SE
Phenanthrene		0.482	0.031	0.2067	0.2365	119	30	130	0	0		E
Pyrene		0.3396	0.031	0.2067	0.1149	109	30	130	0	0		

Qualifiers: ND - Not Detected at

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order:

0412085

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12126

Sample ID 0412059-007BMS Client ID: ZZZZZ	SampType: MS Batch ID: 12126		de: PNA_SOII lo: SW8270C	J	• •	Prep Dat Analysis Da			Run ID: SV SegNo: 320	OC-3_04120	A80
Client ID. ZZZZZ									,		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	2.862	0.041	0.2743	2.502	131	30	130	0	0		SE
Acenaphthylene	0.5206	0.041	0.2743	0.393	46.5	30	130	0	0		
Anthracene	5.312	0.041	0.2743	5.325	-4.59	30	130	0	0		SE
Benz(a)anthracene	8.799	0.041	0.2743	8.593	75	30	130	0	0		E
Benzo(b)fluoranthene	4.45	0.041	0.2743	3.313	415	30	130	0	0		SE
Benzo(k)fluoranthene	2.697	0.041	0.2743	2.576	44.1	30	130	0	0		E
Benzo(g,h,i)perylene	1.367	0.041	0.2743	1.041	119	30	130	0	0		E
Benzo(a)pyrene	3.46	0.041	0.2743	3.327	48.7	30	130	0	0		E
Chrysene	5.214	0.041	0.2743	4.281	340	30	130	0	0		SE
Dibenz(a,h)anthracene	0.6865	0.041	0.2743	0.4489	86.6	30	130	0	0		E
Fluoranthene	13.3	0.041	0.2743	12.25	380	30	130	0	0		SE
Fluorene	3.89	0.041	0.2743	3.638	91.8	30	130	0	0		E
Indeno(1,2,3-cd)pyrene	1.625	0.041	0.2743	1.202	154	30	130	0	0		SE
Naphthalene	2.912	0.041	0.2743	2.65	95.4	30	130	0	0		E
Phenanthrene	14.08	0.041	0.2743	13.5	209	30	130	0	0		SE
Pyrene	11.29	0.041	0.2743	10.63	241	30	130	0	0		SE
Sample ID 0412059-008BMSD	SampType: MSD	TestCo	de: PNA_SOII	B Units: mg/	Kg-dry	Prep Dat	e: 12/7/20	04	Run ID: SV	OC-4_04120)7A
Client ID: ZZZZZ	Batch ID: 12126	Test	lo: SW8270C	-SI		Analysis Da	te: 12/7/20	004	SeqNo: 319	9332	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	0.2072	0.031	0.206	0.07153	65.9	30	130	0.2455	16.9	50	
Acenaphthylene	0.1698	0.031	0.206	0.01364	75.8	30	130	0.1882	10.3	50	
Anthracene	0.259	0.031	0.206	0.07856	87.6	30	130	0.2897	11.2	50	
Benz(a)anthracene	0.2241	0.031	0.206	0.06492	77.3	30	130	0.2592	14.5	50	
Benzo(b)fluoranthene	0.2105	0.031	0.206	0.03845	83.5	30	130	0.2327	10.0	50	
Benzo(k)fluoranthene	0.2311	0.031	0.206	0.03845	93.5	30	130	0.2389	3.34	50	
Benzo(g,h,i)perylene	0.1657	0.031	0.206	0.02522	68.2	30	130	0.1762	6.14	50	
	0.243	0.031	0.206	0.05871	89.5	30	130	0.2794	13.9	50	
Benzo(a)pyrene											
Benzo(a)pyrene Chrysene	0.2426	0.031	0.206	0.06119	88.1	30	130	0.2827	15.3	50	

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order:

0412085

ANALYTICAL QC SUMMARY REPORT

Project: 32088, Willow Street Station- General Iron

BatchID: 12126

Sample ID 0412059-008BMSD	SampType: MSD	TestCo	de: PNA_SOI	L-B Units: m	g/Kg-dry	Prep Dat	e: 12/7/2 0	004	Run ID: SV	OC-4_04120)7A
Client ID: ZZZZZ	Batch ID: 12126	Testi	No: SW8270C	:-SI		Analysis Da	te: 12/7/2 0	004	SeqNo: 31	9332	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoranthene	0.3018	0.031	0.206	0.1398	78.7	30	130	0.3697	20.2	50	
Fluorene	0.2212	0.031	0.206	0.08807	64.6	30	130	0.2592	15.8	50	
Indeno(1,2,3-cd)pyrene	0.1743	0.031	0.206	0.02398	73	30	130	0.1816	4.06	50	
Naphthalene	0.4835	0.031	0.206	0.3887	46.1	30	130	0.6978	36.3	50	Ε
Phenanthrene	0.3713	0.031	0.206	0.2365	65.4	30	130	0.482	25.9	50	
Pyrene	0.273	0.031	0.206	0.1149	76.7	30	130	0.3396	21.7	50	
Sample ID 0412059-007BMSD	SampType: MSD	TestCo	de: PNA_SOI	L-B Units: m	g/Kg-dry	Prep Dat	e: 12/7/2	004	Run ID: SV	OC-3_04120	08A
Client ID: ZZZZZ	Batch ID: 12126	Testi	No: SW8270C	:-SI		Analysis Da	te: 12/8/2 0	004	SeqNo: 32	0058	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	3.377	0.041	0.2728	2.502	321	30	130	2.862	16.5	50	SE
Acenaphthylene	0.544	0.041	0.2728	0.393	55.3	30	130	0.5206	4.40	50	
Anthracene	6.604	0.041	0.2728	5.325	469	30	130	5.312	21.7	50	SE
Benz(a)anthracene	9.881	0.041	0.2728	8.593	472	30	130	8.799	11.6	50	SE
Benzo(b)fluoranthene	4.214	0.041	0.2728	3.313	330	30	130	4.45	5.44	50	SE
Benzo(k)fluoranthene	2.979	0.041	0.2728	2.576	148	30	130	2.697	9.92	50	SE
Benzo(g,h,i)perylene	1.191	0.041	0.2728	1.041	55.3	30	130	1.367	13.7	50	Ε
Benzo(a)pyrene	3.456	0.041	0.2728	3.327	47.3	30	130	3.46	0.132	50	Ε
Chrysene	5.293	0.041	0.2728	4.281	371	30	130	5.214	1.51	50	SE
Dibenz(a,h)anthracene	0.7264	0.041	0.2728	0.4489	102	30	130	0.6865	5.66	50	Е
Fluoranthene	17.93	0.041	0.2728	12.25	2080	30	130	13.3	29.7	50	SE
Fluorene	4.786	0.041	0.2728	3.638	421	30	130	3.89	20.7	50	SE
Indeno(1,2,3-cd)pyrene	1.391	0.041	0.2728	1.202	69.3	30	130	1.625	15.6	50	Ε
Naphthalene	3.092	0.041	0.2728	2.65	162	30	130	2.912	6.02	50	SE
Phenanthrene	20.47	0.041	0.2728	13.5	2550	30	130	14.08	37.0	50	SE
Pyrene	14.97	0.041	0.2728	10.63	1590	30	130	11.29	28.0	50	SE

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

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R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order: 0412085

ANALYTICAL QC SUMMARY REPORT

Project: 32088, Willow Street Station- General Iron

BatchID: 12127

Sample ID MB-12127-SVOC	SampType: MBLK	TestCode: SVOC_SOIL Units:	mg/Kg Prep Date: 12/7/2004	Run ID: SVOC-2_041207B
Client ID: ZZZZZ	Batch ID: 12127	TestNo: SW8270C	Analysis Date: 12/7/2004	SeqNo: 319355
Analyte	Result	PQL SPK value SPK Ref Va	al %REC LowLimit HighLimit RPD Ref Va	al %RPD RPDLimit Qual
1,2,4-Trichlorobenzene	ND	0.17		
1,2-Dichlorobenzene	ND	0.17		
1,3-Dichlorobenzene	ND	0.17		
1,4-Dichlorobenzene	ND	0.17		
2, 2'-oxybis(1-Chloropropane)	ND	0.17		
2,4,5-Trichlorophenol	ND	0.33		
2,4,6-Trichlorophenol	ND	0.17		
2,4-Dichlorophenol	ND	0.17		
2,4-Dimethylphenol	ND	0.17		
2,4-Dinitrophenol	ND	0.80		
2,4-Dinitrotoluene	ND	0.17		
2,6-Dinitrotoluene	ND	0.17		
2-Chloronaphthalene	ND	0.17		
2-Chlorophenol	ND	0.17		
2-Methylnaphthalene	ND	0.17		
2-Methylphenol	ND	0.17		
2-Nitroaniline	ND	0.80		
2-Nitrophenol	ND	0.17		
3,3´-Dichlorobenzidine	ND	0.33		
3-Nitroaniline	ND	0.80		
4,6-Dinitro-2-methylphenol	ND	0.80		
4-Bromophenyl phenyl ether	ND	0.17		
4-Chloro-3-methylphenol	ND	0.17		
4-Chloroaniline	ND	0.17		
4-Chlorophenyl phenyl ether	ND	0.17		
4-Methylphenol	ND	0.17		
4-Nitroaniline	ND	0.80		
4-Nitrophenol	ND	0.80		
Acenaphthene	ND	0.17		
Acenaphthylene	ND	0.17		
Aniline	ND	0.17		

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H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order:

Project:

0412085 32088, Willow Street Station-General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12127

Sample ID MB-12127-SVOC	SampType: MBLK	TestCode: SVOC_SOIL Units: mg/Kg Prep Date: 12/7/2004 Run ID: SVOC-2	2_041207B
Client ID: ZZZZZ	Batch ID: 12127	TestNo: SW8270C Analysis Date: 12/7/2004 SeqNo: 319355	
Analyta	Deault	PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPI	Olimit Ougl
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPI	DLimit Qual
Anthracene	ND	0.17	
Benz(a)anthracene	ND	0.17	
Benzidine	ND	0.17	
Benzo(a)pyrene	ND	0.17	
Benzo(b)fluoranthene	ND	0.17	
Benzo(g,h,i)perylene	ND	0.17	
Benzo(k)fluoranthene	ND	0.17	
Benzoic acid	ND	0.80	
Benzyl alcohol	ND	0.17	
Bis(2-chloroethoxy)methane	ND	0.17	
Bis(2-chloroethyl)ether	ND	0.17	
Bis(2-ethylhexyl)phthalate	ND	0.17	
Butyl benzyl phthalate	ND	0.17	
Carbazole	ND	0.17	
Chrysene	ND	0.17	
Di-n-butyl phthalate	ND	0.17	
Di-n-octyl phthalate	ND	0.17	
Dibenz(a,h)anthracene	ND	0.17	
Dibenzofuran	ND	0.17	
Diethyl phthalate	ND	0.17	
Dimethyl phthalate	ND	0.17	
Fluoranthene	ND	0.17	
Fluorene	ND	0.17	
Hexachlorobenzene	ND	0.17	
Hexachlorobutadiene	ND	0.17	
Hexachlorocyclopentadiene	ND	0.17	
Hexachloroethane	ND	0.17	
Indeno(1,2,3-cd)pyrene	ND	0.17	
Isophorone	ND	0.17	
N-Nitrosodi-n-propylamine	ND	0.17	
N-Nitrosodimethylamine	ND	0.17	
-			

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B - Analyte detected in the associated Method Blanl

Work Order: 0412085

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12127

Sample ID MB-12127-SVOC Client ID: ZZZZZ	SampType: MBLK Batch ID: 12127		e: SVOC_SO o: SW8270C	IL Units: mg/Kg		Prep Date Analysis Dat			Run ID: SV SeqNo: 31	OC-2_0412 9355	07B
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
N-Nitrosodiphenylamine	ND	0.17									
Naphthalene	ND	0.17									
Nitrobenzene	ND	0.17									
Pentachlorophenol	ND	0.80									
Phenanthrene	ND	0.17									
Phenol	ND	0.17									
Pyrene	ND	0.17									
Pyridine	ND	0.17									
Sample ID LCS-12127-SVOC	SampType: LCS	TestCode	e: SVOC_SO	IL Units: mg/Kg		Prep Date	e: 12/7/2 0	004	Run ID: SV	OC-2_0412	07B
Client ID: ZZZZZ	Batch ID: 12127	TestNo	: SW8270C			Analysis Dat	e: 12/7/2 0	004	SeqNo: 31	9356	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	1.25	0.17	1.667	0	75	55	106	0	0		
1,4-Dichlorobenzene	1.156	0.17	1.667	0	69.3	55	90	0	0		
2,4-Dinitrotoluene	1.513	0.17	1.667	0	90.8	55	101	0	0		
2-Chlorophenol	2.499	0.17	3.333	0	75	61	91	0	0		
4-Chloro-3-methylphenol	3.143	0.17	3.333	0	94.3	62	100	0	0		
4-Nitrophenol	3.398	0.80	3.333	0	102	53	123	0	0		
Acenaphthene	1.318	0.17	1.667	0	79.1	65	101	0	0		
N-Nitrosodi-n-propylamine	1.741	0.17	1.667	0	104	55	100	0	0		S
Pentachlorophenol	3.213	0.80	3.333	0	96.4	40	120	0	0		
Phenol	3.045	0.17	3.333	0	91.4	60	91	0	0		S
Pyrene	1.518	0.17	1.667	0	91.1	50	131	0	0		
Sample ID 0412059-007BMS	SampType: MS	TestCode	e: SVOC_SO	IL- Units: mg/Kg	-dry	Prep Date	e: 12/7/2 0	004	Run ID: SV	OC-2_0412	07B
Client ID: ZZZZZ	Batch ID: 12127	TestNo	: SW8270C			Analysis Dat	e: 12/8/2 0	004	SeqNo: 31	9418	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloro-3-methylphenol	6.017	0.54	5.477	0	110	62	100	0	0		S
2-Chlorophenol	3.486	0.54	5.477	0	63.6	61	91	0	0		

Qualifiers:

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H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Page 9 of 25

Work Order:

Project:

0412085

32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12127

Sample ID 0412059-007BMS Client ID: ZZZZZ	SampType: MS Batch ID: 12127		de: SVOC_S0 lo: SW8270C	OIL- Units: mg/	•	Prep Dat Analysis Da	te: 12/7/20		Run ID: SV SeqNo: 31	OC-2_04120	07B
Client ID. ZZZZZ	Balcii ID. 12121	resuv	NO. 3446270C	•		Alialysis Da	ile. 12/0/20	004	Sequo. 31	9410	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	1.558	0.54	2.739	0	56.9	55	90	0	0		
2,4-Dinitrotoluene	2.545	0.28	2.739	0	92.9	55	101	0	0		
4-Nitrophenol	3.842	2.6	5.477	0	70.1	53	123	0	0		
N-Nitrosodi-n-propylamine	2.295	0.28	2.739	0	83.8	55	100	0	0		
Pentachlorophenol	2.754	2.6	5.477	0	50.3	40	120	0	0		
Phenol	4.336	0.54	5.477	0	79.2	60	91	0	0		
1,2,4-Trichlorobenzene	2.062	0.54	2.739	0	75.3	55	106	0	0		
Sample ID 0412059-008BMS	SampType: MS	TestCod	de: SVOC_S	OIL- Units: mg/	Kg-dry	Prep Dat	te: 12/7/2 0	004	Run ID: SV	OC-2_04120	07B
Client ID: ZZZZZ	Batch ID: 12127	TestN	lo: SW8270C	;		Analysis Da	te: 12/8/2	004	SeqNo: 31	9426	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloro-3-methylphenol	3.858	0.41	4.126	0	93.5	62	100	0	0		
2-Chlorophenol	3.017	0.41	4.126	0	73.1	61	91	0	0		
1,4-Dichlorobenzene	1.417	0.41	2.064	0	68.6	55	90	0	0		
2,4-Dinitrotoluene	1.416	0.21	2.064	0	68.6	55	101	0	0		
4-Nitrophenol	2.618	2.0	4.126	0	63.5	53	123	0	0		
N-Nitrosodi-n-propylamine	2.165	0.21	2.064	0	105	55	100	0	0		S
Pentachlorophenol	0.7362	2.0	4.126	0	17.8	40	120	0	0		JS
Phenol	3.488	0.41	4.126	0	84.5	60	91	0	0		
1,2,4-Trichlorobenzene	1.746	0.41	2.064	0	84.6	55	106	0	0		
Sample ID 0412059-007BMSD	SampType: MSD	TestCod	de: SVOC_S	OIL- Units: mg/	Kg-dry	Prep Dat	te: 12/7/2	004	Run ID: SV	OC-2_04120	07B
Client ID: ZZZZZ	Batch ID: 12127	TestN	lo: SW8270C	;		Analysis Da	te: 12/8/2	004	SeqNo: 31	9421	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloro-3-methylphenol	5.496	0.54	5.479	0	100	62	100	6.017	9.05	33	
2-Chlorophenol	3.706	0.54	5.479	0	67.6	61	91	3.486	6.11	50	
1,4-Dichlorobenzene	1.673	0.54	2.74	0	61.1	55	90	1.558	7.15	27	
2,4-Dinitrotoluene	2.354	0.28	2.74	0	85.9	55	101	2.545	7.80	47	
4-Nitrophenol	3.572	2.6	5.479	0	65.2	53	123	3.842	7.27	50	

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Work Order: 0412085

Project: 32088, Willow Street Station-General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12127

Sample ID 0412059-007BMSD	SampType: MSD	TestCoo	de: SVOC_SOI	L- Units: mg/	Kg-dry	Prep Dat	e: 12/7/2 0	004	Run ID: SV	OC-2_04120)7B
Client ID: ZZZZZ	Batch ID: 12127	TestN	lo: SW8270C			Analysis Dat	te: 12/8/2 0	004	SeqNo: 31	9421	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
N-Nitrosodi-n-propylamine	2.423	0.28	2.74	0	88.4	55	100	2.295	5.42	38	
Pentachlorophenol	2.15	2.6	5.479	0	39.2	40	120	2.754	0	47	JS
Phenol	4.401	0.54	5.479	0	80.3	60	91	4.336	1.49	35	
1,2,4-Trichlorobenzene	2.183	0.54	2.74	0	79.7	55	106	2.062	5.69	23	
Sample ID 0412059-008BMSD	SampType: MSD	TestCoo	de: SVOC_SOI	L- Units: mg/	Kg-dry	Prep Dat	e: 12/7/2 0	004	Run ID: SV	OC-2_04120)7B
Client ID: ZZZZZ	Batch ID: 12127	TestN	lo: SW8270C			Analysis Dat	te: 12/8/2 0	004	SeqNo: 31	9428	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloro-3-methylphenol	4.443	0.40	4.078	0	109	62	100	3.858	14.1	33	S
2-Chlorophenol	3.754	0.40	4.078	0	92.1	61	91	3.017	21.8	50	S
1,4-Dichlorobenzene	1.769	0.40	2.04	0	86.7	55	90	1.417	22.1	27	
2,4-Dinitrotoluene	1.733	0.21	2.04	0	85	55	101	1.416	20.1	47	
4-Nitrophenol	2.941	2.0	4.078	0	72.1	53	123	2.618	11.6	50	
N-Nitrosodi-n-propylamine	2.651	0.21	2.04	0	130	55	100	2.165	20.2	38	S
Pentachlorophenol	0.9311	2.0	4.078	0	22.8	40	120	0.7362	0	47	JS
Phenol	4.341	0.40	4.078	0	106	60	91	3.488	21.8	35	S
1,2,4-Trichlorobenzene	2.154	0.40	2.04	0	106	55	106	1.746	20.9	23	

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Work Order: 0412085

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12105

Sample ID 0412059-007AMS	SampType: MS	TestCo	de: VOC_ENC	OR Units: mg/l	(g-dry	Prep Dat	te: 12/3/2 0	004	Run ID: VO	A-2_041208	3B
Client ID: ZZZZZ	Batch ID: 12105	TestN	lo: SW5035/ 8	260		Analysis Da	te: 12/9/2 0	004	SeqNo: 32	0114	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.1139	0.012	0.1191	0	95.7	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.06805	0.012	0.1191	0	57.2	70	130	0	0		S
1,1,2-Trichloroethane	0.1022	0.012	0.1191	0	85.8	70	130	0	0		
1,1-Dichloroethane	0.1111	0.012	0.1191	0	93.3	70	130	0	0		
1,1-Dichloroethene	0.1068	0.012	0.1191	0	89.7	50	234	0	0		
1,2-Dichloroethane	0.0936	0.012	0.1191	0	78.6	70	130	0	0		
1,2-Dichloropropane	0.09865	0.012	0.1191	0	82.9	70	130	0	0		
2-Butanone	0.0912	0.024	0.1191	0	76.6	70	130	0	0		
2-Hexanone	0.09518	0.024	0.1191	0	79.9	70	130	0	0		
4-Methyl-2-pentanone	0.09303	0.024	0.1191	0	78.1	70	130	0	0		
Acetone	0.2836	0.060	0.1191	0.0299	213	70	130	0	0		S
Benzene	0.1053	0.012	0.1191	0.003606	85.4	37	151	0	0		
Bromodichloromethane	0.07474	0.012	0.1191	0	62.8	70	130	0	0		S
Bromoform	0.05958	0.012	0.1191	0	50	70	130	0	0		S
Bromomethane	0.07482	0.024	0.1191	0	62.8	70	130	0	0		S
Carbon disulfide	0.109	0.012	0.1191	0.00462	87.7	70	130	0	0		
Carbon tetrachloride	0.09756	0.012	0.1191	0	81.9	70	130	0	0		
Chlorobenzene	0.09146	0.012	0.1191	0	76.8	37	160	0	0		
Chloroethane	0.115	0.024	0.1191	0	96.6	70	130	0	0		
Chloroform	0.1072	0.012	0.1191	0	90.1	70	130	0	0		
Chloromethane	0.08641	0.024	0.1191	0	72.6	70	130	0	0		
cis-1,2-Dichloroethene	0.09294	0.012	0.1191	0	78.1	70	130	0	0		
cis-1,3-Dichloropropene	0.05881	0.012	0.1191	0	49.4	70	130	0	0		S
Dibromochloromethane	0.07948	0.012	0.1191	0	66.8	70	130	0	0		S
Ethylbenzene	0.1045	0.012	0.1191	0.001503	86.5	70	130	0	0		
Methyl tert-butyl ether	0.1197	0.012	0.1191	0	101	50	150	0	0		
Methylene chloride	0.09437	0.024	0.1191	0	79.3	70	130	0	0		
Styrene	0.07575	0.012	0.1191	0	63.6	70	130	0	0		S
Tetrachloroethene	0.1136	0.012	0.1191	0	95.4	70	130	0	0		
Toluene	0.09606	0.012	0.1191	0.001446	79.5	47	150	0	0		
trans-1,2-Dichloroethene	0.09394	0.012	0.1191	0	78.9	70	130	0	0		

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Work Order: 0412085

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12105

Sample ID 0412059-007AMS	SampType: MS	TestCo	de: VOC_ENC	OR Units: mg/	Kg-dry	Prep Date	e: 12/3/2 0	004	Run ID: VO	A-2_04120	8B
Client ID: ZZZZZ	Batch ID: 12105	TestN	No: SW5035/ 8	3260		Analysis Dat	e: 12/9/2 0	004	SeqNo: 320	0114	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	0.0692	0.012	0.1191	0	58.1	70	130	0	0		S
Trichloroethene	0.09213	0.012	0.1191	0	77.4	71	157	0	0		
Vinyl chloride	0.1074	0.012	0.1191	0	90.2	70	130	0	0		
Xylenes, Total	0.3171	0.024	0.3572	0.01151	85.6	70	130	0	0		
Sample ID 0412059-008AMS	SampType: MS	TestCo	de: VOC_ENC	OR Units: mg/	Kg-dry	Prep Date	e: 12/3/2 0	004	Run ID: VO	A-2_04120	8B
Client ID: ZZZZZ	Batch ID: 12105	TestN	No: SW5035/8	3260		Analysis Dat	e: 12/9/2 0	004	SeqNo: 320	0118	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.04885	0.0060	0.05987	0	81.6	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.0265	0.0060	0.05987	0	44.3	70	130	0	0		S
1,1,2-Trichloroethane	0.03336	0.0060	0.05987	0	55.7	70	130	0	0		S
1,1-Dichloroethane	0.04198	0.0060	0.05987	0	70.1	70	130	0	0		
1,1-Dichloroethene	0.04539	0.0060	0.05987	0	75.8	50	234	0	0		
1,2-Dichloroethane	0.03387	0.0060	0.05987	0	56.6	70	130	0	0		S
1,2-Dichloropropane	0.03267	0.0060	0.05987	0	54.6	70	130	0	0		S
2-Butanone	0.04464	0.012	0.05987	0	74.6	70	130	0	0		
2-Hexanone	0.03301	0.012	0.05987	0	55.1	70	130	0	0		S
4-Methyl-2-pentanone	0.03599	0.012	0.05987	0	60.1	70	130	0	0		S
Acetone	0.07714	0.030	0.05987	0.01254	108	70	130	0	0		
Benzene	0.03734	0.0060	0.05987	0	62.4	37	151	0	0		
Bromodichloromethane	0.0208	0.0060	0.05987	0	34.7	70	130	0	0		S
Bromoform	0.01543	0.0060	0.05987	0	25.8	70	130	0	0		S
Bromomethane	0.03663	0.012	0.05987	0	61.2	70	130	0	0		S
Carbon disulfide	0.05982	0.0060	0.05987	0.0008626	98.5	70	130	0	0		
Carbon tetrachloride	0.04049	0.0060	0.05987	0	67.6	70	130	0	0		S
Chlorobenzene	0.02652	0.0060	0.05987	0	44.3	37	160	0	0		
Chloroethane	0.04971	0.012	0.05987	0	83	70	130	0	0		
Chloroform	0.04086	0.0060	0.05987	0	68.3	70	130	0	0		S
Chloromethane	0.04592	0.012	0.05987	0	76.7	70	130	0	0		
cis-1,2-Dichloroethene	0.03876	0.0060	0.05987	0	64.7	70	130	0	0		S

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Work Order:

0412085

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12105

Sample ID 0412059-008AMS	SampType: MS	TestCo	de: VOC_ENC	OR Units: mg/	Kg-dry	Prep Dat	e: 12/3/20	04	Run ID: VC	OA-2_041208	3B
Client ID: ZZZZZ	Batch ID: 12105	TestN	lo: SW5035/8	260		Analysis Da	te: 12/9/20	04	SeqNo: 32	0118	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	0.02146	0.0060	0.05987	0	35.8	70	130	0	0		S
Dibromochloromethane	0.02158	0.0060	0.05987	0	36	70	130	0	0		S
Ethylbenzene	0.03603	0.0060	0.05987	0.001227	58.1	70	130	0	0		S
Methyl tert-butyl ether	0.05601	0.0060	0.05987	0	93.6	50	150	0	0		
Methylene chloride	0.04683	0.012	0.05987	0.001555	75.6	70	130	0	0		
Styrene	0.0213	0.0060	0.05987	0	35.6	70	130	0	0		S
Tetrachloroethene	0.04665	0.0060	0.05987	0	77.9	70	130	0	0		
Toluene	0.03339	0.0060	0.05987	0.002916	50.9	47	150	0	0		
trans-1,2-Dichloroethene	0.04502	0.0060	0.05987	0	75.2	70	130	0	0		
trans-1,3-Dichloropropene	0.02362	0.0060	0.05987	0	39.5	70	130	0	0		S
Trichloroethene	0.03397	0.0060	0.05987	0	56.7	71	157	0	0		S
Vinyl chloride	0.05528	0.0060	0.05987	0	92.3	70	130	0	0		
Xylenes, Total	0.1103	0.012	0.1796	0.005601	58.3	70	130	0	0		S

Sample ID 0412059-007AMSD	SampType: MSD	TestCo	de: VOC_ENC	OR Units: mg/l	Kg-dry	Prep Dat	te: 12/3/2 0	004	Run ID: VC	A-2_041208	BB
Client ID: ZZZZZ	Batch ID: 12105	TestN	No: SW5035/8	3260		Analysis Da	te: 12/9/2 0	004	SeqNo: 32	0115	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.1064	0.011	0.1102	0	96.6	70	130	0.09293	13.6	25	
1,1,2,2-Tetrachloroethane	0.06033	0.011	0.1102	0	54.8	70	130	0.06	0.556	25	S
1,1,2-Trichloroethane	0.08884	0.011	0.1102	0	80.6	70	130	0.0812	8.99	25	
1,1-Dichloroethane	0.1008	0.011	0.1102	0	91.5	70	130	0.0895	11.9	25	
1,1-Dichloroethene	0.1007	0.011	0.1102	0	91.4	50	234	0.08104	21.6	25	
1,2-Dichloroethane	0.08587	0.011	0.1102	0	77.9	70	130	0.07566	12.6	25	
1,2-Dichloropropane	0.09252	0.011	0.1102	0	84	70	130	0.08242	11.5	25	
2-Butanone	0.07888	0.022	0.1102	0	71.6	70	130	0.07562	4.23	25	
2-Hexanone	0.09301	0.022	0.1102	0	84.4	70	130	0.08263	11.8	25	
4-Methyl-2-pentanone	0.0918	0.022	0.1102	0	83.3	70	130	0.08269	10.4	25	
Acetone	0.2253	0.055	0.1102	0.0299	177	70	130	0.2049	9.46	25	S
Benzene	0.1002	0.011	0.1102	0.003606	87.7	37	151	0.08886	12.0	25	
Bromodichloromethane	0.06249	0.011	0.1102	0	56.7	70	130	0.05501	12.7	25	S

Qualifiers:

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rery limits B - Analyte detected in the associated Method Blanl

Work Order: 0412085

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12105

Sample ID 0412059-007AMSD	SampType: MSD	TestCod	de: VOC_ENC	OR Units: mg/	Kg-dry	Prep Date:	12/3/20	004	Run ID: VO	A-2_041208	В
Client ID: ZZZZZ	Batch ID: 12105	TestN	lo: SW5035/ 8	3260		Analysis Date	: 12/9/20	004	SeqNo: 320	0115	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.04685	0.011	0.1102	0	42.5	70	130	0.04115	12.9	25	S
Bromomethane	0.06765	0.022	0.1102	0	61.4	70	130	0.05458	21.4	25	S
Carbon disulfide	0.1049	0.011	0.1102	0.00462	91	70	130	0.08503	20.9	25	
Carbon tetrachloride	0.08752	0.011	0.1102	0	79.4	70	130	0.06717	26.3	25	R
Chlorobenzene	0.07862	0.011	0.1102	0	71.4	37	160	0.0745	5.38	25	
Chloroethane	0.1009	0.022	0.1102	0	91.6	70	130	0.08799	13.7	25	
Chloroform	0.09946	0.011	0.1102	0	90.3	70	130	0.0855	15.1	25	
Chloromethane	0.07921	0.022	0.1102	0	71.9	70	130	0.06897	13.8	25	
cis-1,2-Dichloroethene	0.08353	0.011	0.1102	0	75.8	70	130	0.07402	12.1	25	
cis-1,3-Dichloropropene	0.05584	0.011	0.1102	0	50.7	70	130	0.04535	20.7	25	S
Dibromochloromethane	0.06342	0.011	0.1102	0	57.6	70	130	0.0564	11.7	25	S
Ethylbenzene	0.09446	0.011	0.1102	0.001503	84.4	70	130	0.08441	11.2	25	
Methyl tert-butyl ether	0.1129	0.011	0.1102	0	102	50	150	0.0993	12.8	0	
Methylene chloride	0.09217	0.022	0.1102	0	83.7	70	130	0.08054	13.5	25	
Styrene	0.06538	0.011	0.1102	0	59.3	70	130	0.06482	0.860	25	S
Tetrachloroethene	0.1036	0.011	0.1102	0	94.1	70	130	0.09072	13.3	25	
Toluene	0.08994	0.011	0.1102	0.001446	80.3	47	150	0.07849	13.6	25	
trans-1,2-Dichloroethene	0.08717	0.011	0.1102	0	79.1	70	130	0.07214	18.9	25	
trans-1,3-Dichloropropene	0.05903	0.011	0.1102	0	53.6	70	130	0.05391	9.06	25	S
Trichloroethene	0.08887	0.011	0.1102	0	80.7	71	157	0.07408	18.1	25	
Vinyl chloride	0.1015	0.011	0.1102	0	92.1	70	130	0.0836	19.3	25	
Xylenes, Total	0.2875	0.022	0.3305	0.01151	83.5	70	130	0.2641	8.45	25	
Sample ID 0412059-008AMSD	SampType: MSD	TestCod	de: VOC_ENC	OR Units: mg/	Kg-dry	Prep Date:	12/3/20	004	Run ID: VO	A-2_041208	ВВ
Client ID: ZZZZZ	Batch ID: 12105	TestN	lo: SW5035/8	3260		Analysis Date	: 12/9/20	004	SeqNo: 320	0119	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.05033	0.0058	0.05803	0	86.7	70	130	0.04885	2.99	25	
1,1,2,2-Tetrachloroethane	0.02617	0.0058	0.05803	0	45.1	70	130	0.0265	1.24	25	s
1,1,2-Trichloroethane	0.03335	0.0058	0.05803	0	57.5	70	130	0.03336	0.0108	25	S
1,1-Dichloroethane	0.04169	0.0058	0.05803	0	71.8	70	130	0.04198	0.697	25	-

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Work Order: 0412085

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: 12105

Sample ID 0412059-008AMSD	SampType: MSD			OR Units: mg/		Prep Dat				A-2_041208	ВВ
Client ID: ZZZZZ	Batch ID: 12105	TestN	No: SW5035/8	260		Analysis Da	te: 12/9/2 0	004	SeqNo: 320	0119	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.04865	0.0058	0.05803	0	83.8	50	234	0.04539	6.93	25	
1,2-Dichloroethane	0.03205	0.0058	0.05803	0	55.2	70	130	0.03387	5.52	25	S
1,2-Dichloropropane	0.03155	0.0058	0.05803	0	54.4	70	130	0.03267	3.49	25	S
2-Butanone	0.03873	0.012	0.05803	0	66.7	70	130	0.04464	14.2	25	S
2-Hexanone	0.03158	0.012	0.05803	0	54.4	70	130	0.03301	4.43	25	S
4-Methyl-2-pentanone	0.03449	0.012	0.05803	0	59.4	70	130	0.03599	4.26	25	S
Acetone	0.08128	0.029	0.05803	0.01254	118	70	130	0.07714	5.23	25	
Benzene	0.03737	0.0058	0.05803	0	64.4	37	151	0.03734	0.0663	25	
Bromodichloromethane	0.01929	0.0058	0.05803	0	33.2	70	130	0.0208	7.53	25	S
Bromoform	0.01174	0.0058	0.05803	0	20.2	70	130	0.01543	27.1	25	SR
Bromomethane	0.03266	0.012	0.05803	0	56.3	70	130	0.03663	11.5	25	S
Carbon disulfide	0.0574	0.0058	0.05803	0.0008626	97.4	70	130	0.05982	4.13	25	
Carbon tetrachloride	0.04207	0.0058	0.05803	0	72.5	70	130	0.04049	3.82	25	
Chlorobenzene	0.02915	0.0058	0.05803	0	50.2	37	160	0.02652	9.46	25	
Chloroethane	0.05392	0.012	0.05803	0	92.9	70	130	0.04971	8.12	25	
Chloroform	0.03772	0.0058	0.05803	0	65	70	130	0.04086	8.01	25	S
Chloromethane	0.0478	0.012	0.05803	0	82.4	70	130	0.04592	4.02	25	
cis-1,2-Dichloroethene	0.03565	0.0058	0.05803	0	61.4	70	130	0.03876	8.35	25	S
cis-1,3-Dichloropropene	0.018	0.0058	0.05803	0	31	70	130	0.02146	17.5	25	S
Dibromochloromethane	0.01889	0.0058	0.05803	0	32.6	70	130	0.02158	13.3	25	S
Ethylbenzene	0.04374	0.0058	0.05803	0.001227	73.3	70	130	0.03603	19.3	25	
Methyl tert-butyl ether	0.05752	0.0058	0.05803	0	99.1	50	150	0.05601	2.65	0	
Methylene chloride	0.04676	0.012	0.05803	0.001555	77.9	70	130	0.04683	0.148	25	
Styrene	0.02318	0.0058	0.05803	0	39.9	70	130	0.0213	8.43	25	S
Tetrachloroethene	0.05571	0.0058	0.05803	0	96	70	130	0.04665	17.7	25	
Toluene	0.03407	0.0058	0.05803	0.002916	53.7	47	150	0.03339	2.02	25	
trans-1,2-Dichloroethene	0.04447	0.0058	0.05803	0	76.6	70	130	0.04502	1.22	25	
trans-1,3-Dichloropropene	0.02111	0.0058	0.05803	0	36.4	70	130	0.02362	11.2	25	S
Trichloroethene	0.03299	0.0058	0.05803	0	56.9	71	157	0.03397	2.91	25	S
Vinyl chloride	0.05988	0.0058	0.05803	0	103	70	130	0.05528	7.99	25	
Xylenes, Total	0.1298	0.012	0.1741	0.005601	71.4	70	130	0.1103	16.2	25	

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Work Order: 0412085

Project:

ANALYTICAL QC SUMMARY REPORT

32088, Willow Street Station- General Iron

BatchID: R15606

Sample ID VBLK120804a-2	SampType: MBLK	TestCod	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	te:		Run ID: VC	A-2_041208	зв
Client ID: ZZZZZ	Batch ID: R15606	TestN	lo: SW5035/ 8	3260		Analysis Da	te: 12/8/2	004	SeqNo: 32	0109	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.0050									
1,1,2,2-Tetrachloroethane	ND	0.0050									
1,1,2-Trichloroethane	ND	0.0050									
1,1-Dichloroethane	ND	0.0050									
1,1-Dichloroethene	ND	0.0050									
1,2-Dichloroethane	ND	0.0050									
1,2-Dichloropropane	ND	0.0050									
2-Butanone	ND	0.010									
2-Hexanone	ND	0.010									
4-Methyl-2-pentanone	ND	0.010									
Acetone	ND	0.025									
Benzene	ND	0.0050									
Bromodichloromethane	ND	0.0050									
Bromoform	ND	0.0050									
Bromomethane	ND	0.010									
Carbon disulfide	ND	0.0050									
Carbon tetrachloride	ND	0.0050									
Chlorobenzene	ND	0.0050									
Chloroethane	ND	0.010									
Chloroform	ND	0.0050									
Chloromethane	ND	0.010									
cis-1,2-Dichloroethene	ND	0.0050									
cis-1,3-Dichloropropene	ND	0.0050									
Dibromochloromethane	ND	0.0050									
Ethylbenzene	ND	0.0050									
Methyl tert-butyl ether	ND	0.0050									
Methylene chloride	0.00436	0.010									J
Styrene	ND	0.0050									
Tetrachloroethene	ND	0.0050									
Toluene	ND	0.0050									
trans-1,2-Dichloroethene	ND	0.0050									

Qualifiers:

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Work Order: 0412085

ANALYTICAL QC SUMMARY REPORT

BatchID: R15606 **Project:** 32088, Willow Street Station-General Iron

Sample ID VBLK120804a-2 Client ID: ZZZZZ	SampType: MBLK Batch ID: R15606		de: VOC_ENC	COR Units: mg/Kg		Prep Dat Analysis Da		004	Run ID: VC	0A-2_041208 0109	ЗВ
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	0.0050									
Trichloroethene	ND	0.0050									
Vinyl chloride	ND	0.0050									
Xylenes, Total	ND	0.010									

Sample ID VLCS120804A-2	SampType: LCS	TestCo	de: VOC_ENC	COR Units: mg/Kg		Prep Da	te:		Run ID: V	DA-2_04120	BB
Client ID: ZZZZZ	Batch ID: R15606	Test	No: SW5035/ 8	3260		Analysis Da	ate: 12/8/20	004	SeqNo: 32	20110	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.04839	0.0050	0.05	0	96.8	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.04354	0.0050	0.05	0	87.1	70	130	0	0		
1,1,2-Trichloroethane	0.0486	0.0050	0.05	0	97.2	70	130	0	0		
1,1-Dichloroethane	0.04704	0.0050	0.05	0	94.1	70	130	0	0		
1,1-Dichloroethene	0.04583	0.0050	0.05	0	91.7	70	130	0	0		
1,2-Dichloroethane	0.04964	0.0050	0.05	0	99.3	70	130	0	0		
1,2-Dichloropropane	0.04561	0.0050	0.05	0	91.2	70	130	0	0		
2-Butanone	0.04875	0.010	0.05	0	97.5	70	130	0	0		
2-Hexanone	0.04437	0.010	0.05	0	88.7	70	130	0	0		
4-Methyl-2-pentanone	0.04491	0.010	0.05	0	89.8	70	130	0	0		
Acetone	0.05825	0.025	0.05	0	116	50	150	0	0		
Benzene	0.04706	0.0050	0.05	0	94.1	70	130	0	0		
Bromodichloromethane	0.04388	0.0050	0.05	0	87.8	70	130	0	0		
Bromoform	0.04745	0.0050	0.05	0	94.9	70	130	0	0		
Bromomethane	0.03668	0.010	0.05	0	73.4	70	130	0	0		
Carbon disulfide	0.06115	0.0050	0.05	0	122	70	130	0	0		
Carbon tetrachloride	0.04788	0.0050	0.05	0	95.8	70	130	0	0		
Chlorobenzene	0.04764	0.0050	0.05	0	95.3	70	130	0	0		
Chloroethane	0.04616	0.010	0.05	0	92.3	70	130	0	0		
Chloroform	0.04913	0.0050	0.05	0	98.3	70	130	0	0		
Chloromethane	0.03657	0.010	0.05	0	73.1	70	130	0	0		
cis-1,2-Dichloroethene	0.04949	0.0050	0.05	0	99	70	130	0	0		

Qualifiers:

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Work Order:

0412085

32088, Willow Street Station-General Iron **Project:**

ANALYTICAL QC SUMMARY REPORT

BatchID: R15606

Sample ID VLCS120804A-2	SampType: LCS	TestCod	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	te:		Run ID: VC	A-2_041208	3B
Client ID: ZZZZZ	Batch ID: R15606	TestN	lo: SW5035/8	3260		Analysis Da	ite: 12/8/20	004	SeqNo: 32	0110	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	0.04648	0.0050	0.05	0	93	70	130	0	0		
Dibromochloromethane	0.04848	0.0050	0.05	0	97	70	130	0	0		
Ethylbenzene	0.04738	0.0050	0.05	0	94.8	70	130	0	0		
Methyl tert-butyl ether	0.04914	0.0050	0.05	0	98.3	50	150	0	0		
Methylene chloride	0.04532	0.010	0.05	0.00436	81.9	70	130	0	0		
Styrene	0.045	0.0050	0.05	0	90	70	130	0	0		
Tetrachloroethene	0.05087	0.0050	0.05	0	102	70	130	0	0		
Toluene	0.04651	0.0050	0.05	0	93	70	130	0	0		
trans-1,2-Dichloroethene	0.04986	0.0050	0.05	0	99.7	70	130	0	0		
trans-1,3-Dichloropropene	0.05239	0.0050	0.05	0	105	70	130	0	0		
Trichloroethene	0.04827	0.0050	0.05	0	96.5	70	130	0	0		
Vinyl chloride	0.04699	0.0050	0.05	0	94	70	130	0	0		
Xylenes, Total	0.1462	0.010	0.15	0	97.5	70	130	0	0		
Sample ID VLCSD120804A-2	SampType: LCSD	TestCod	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	te:		Run ID: VC	OA-2_041208	3B
Sample ID VLCSD120804A-2 Client ID: ZZZZZ	SampType: LCSD Batch ID: R15606		de: VOC_ENC lo: SW5035/8			Prep Dat Analysis Da		004	Run ID: VC SeqNo: 32		3B
•			lo: SW5035/8		%REC	Analysis Da					BB Qual
Client ID: ZZZZZ	Batch ID: R15606	TestN	lo: SW5035/8	3260		Analysis Da	ite: 12/8/20		SeqNo: 32	0111	
Client ID: ZZZZZ Analyte	Batch ID: R15606 Result	TestN PQL	lo: SW5035/8	SPK Ref Val	%REC	Analysis Da	te: 12/8/2 0	RPD Ref Val	SeqNo: 32	0111 RPDLimit	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane	Batch ID: R15606 Result 0.04828	PQL 0.0050	SPK value 0.05	SPK Ref Val	%REC 96.6	Analysis Da	HighLimit 130	RPD Ref Val 0.04839	SeqNo: 32 %RPD 0.228	0111 RPDLimit	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	Result 0.04828 0.04338	PQL 0.0050 0.0050	SPK value 0.05 0.05	SPK Ref Val 0 0	%REC 96.6 86.8	Analysis Da LowLimit 70 70	HighLimit 130 130	RPD Ref Val 0.04839 0.04354	SeqNo: 32 0 %RPD 0.228 0.368	0111 RPDLimit 20 20	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane	Result 0.04828 0.04338 0.04782	PQL 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05	SPK Ref Val 0 0 0	%REC 96.6 86.8 95.6	Analysis Da LowLimit 70 70 70	HighLimit 130 130 130	RPD Ref Val 0.04839 0.04354 0.0486	SeqNo: 32 0 %RPD 0.228 0.368 1.62	0111 RPDLimit 20 20 20 20	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane	Result 0.04828 0.04338 0.04782 0.04822	PQL 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0	%REC 96.6 86.8 95.6 96.4	Analysis Da LowLimit 70 70 70 70 70	HighLimit 130 130 130 130	RPD Ref Val 0.04839 0.04354 0.0486 0.04704	SeqNo: 32 / %RPD 0.228 0.368 1.62 2.48	0111 RPDLimit 20 20 20 20 20	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane	Batch ID: R15606 Result 0.04828 0.04338 0.04782 0.04822 0.04525	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0	%REC 96.6 86.8 95.6 96.4 90.5	Analysis Da LowLimit 70 70 70 70 70	HighLimit 130 130 130 130 130 130	RPD Ref Val 0.04839 0.04354 0.0486 0.04704 0.04583	SeqNo: 32 %RPD 0.228 0.368 1.62 2.48 1.27	0111 RPDLimit 20 20 20 20 20 20 20	
Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane	Result 0.04828 0.04338 0.04782 0.04822 0.04525 0.04803	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0 0	%REC 96.6 86.8 95.6 96.4 90.5 96.1	Analysis Da LowLimit 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130	RPD Ref Val 0.04839 0.04354 0.0486 0.04704 0.04583 0.04964	SeqNo: 32 6 %RPD 0.228 0.368 1.62 2.48 1.27 3.30	0111 RPDLimit 20 20 20 20 20 20 20 20 20	
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane	Result 0.04828 0.04338 0.04782 0.04822 0.04525 0.04803 0.04651	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0	%REC 96.6 86.8 95.6 96.4 90.5 96.1 93	Analysis Da LowLimit 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 130 130 130 130 130	RPD Ref Val 0.04839 0.04354 0.0486 0.04704 0.04583 0.04964 0.04561	SeqNo: 32 6 %RPD 0.228 0.368 1.62 2.48 1.27 3.30 1.95	PDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	
Analyte 1,1,1-Trichloroethane 1,1,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone	Result 0.04828 0.04338 0.04782 0.04822 0.04525 0.04803 0.04651 0.04659	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0 0	%REC 96.6 86.8 95.6 96.4 90.5 96.1 93 93.2	Analysis Da LowLimit 70 70 70 70 70 70 70 70 70 7	HighLimit 130 130 130 130 130 130 130 130 130 13	RPD Ref Val 0.04839 0.04354 0.0486 0.04704 0.04583 0.04964 0.04561 0.04875	SeqNo: 32 6 %RPD 0.228 0.368 1.62 2.48 1.27 3.30 1.95 4.53	PDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone 2-Hexanone	Result 0.04828 0.04338 0.04782 0.04822 0.04525 0.04803 0.04651 0.04659 0.04416	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0010 0.010	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0 0 0 0	%REC 96.6 86.8 95.6 96.4 90.5 96.1 93 93.2 88.3	Analysis Da LowLimit 70 70 70 70 70 70 70 70 70 7	HighLimit 130 130 130 130 130 130 130 130 130 13	RPD Ref Val 0.04839 0.04354 0.0486 0.04704 0.04583 0.04964 0.04561 0.04875 0.04437	SeqNo: 32/ %RPD 0.228 0.368 1.62 2.48 1.27 3.30 1.95 4.53 0.474	PDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	
Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone 2-Hexanone 4-Methyl-2-pentanone	Result 0.04828 0.04338 0.04782 0.04822 0.04525 0.04803 0.04651 0.04659 0.04416 0.04471	PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0010 0.010 0.010	SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.	SPK Ref Val 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	%REC 96.6 86.8 95.6 96.4 90.5 96.1 93 93.2 88.3 89.4	Analysis Da LowLimit 70 70 70 70 70 70 70 70 70 7	HighLimit 130 130 130 130 130 130 130 130 130 13	RPD Ref Val 0.04839 0.04354 0.0486 0.04704 0.04583 0.04964 0.04561 0.04875 0.04437 0.04491	SeqNo: 32/ %RPD 0.228 0.368 1.62 2.48 1.27 3.30 1.95 4.53 0.474 0.446	PDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	

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Work Order: 0412085

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15606

Sample ID VLCSD120804A-2	SampType: LCSD		de: VOC_ENC	0 0		Prep Date				A-2_041208	В
Client ID: ZZZZZ	Batch ID: R15606	TestN	lo: SW5035/8	3260		Analysis Dat	e: 12/8/2 0	004	SeqNo: 320	0111	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.04786	0.0050	0.05	0	95.7	70	130	0.04745	0.860	20	
Bromomethane	0.03691	0.010	0.05	0	73.8	70	130	0.03668	0.625	20	
Carbon disulfide	0.0626	0.0050	0.05	0	125	70	130	0.06115	2.34	20	
Carbon tetrachloride	0.04784	0.0050	0.05	0	95.7	70	130	0.04788	0.0836	20	
Chlorobenzene	0.04848	0.0050	0.05	0	97	70	130	0.04764	1.75	20	
Chloroethane	0.04874	0.010	0.05	0	97.5	70	130	0.04616	5.44	20	
Chloroform	0.05087	0.0050	0.05	0	102	70	130	0.04913	3.48	20	
Chloromethane	0.03826	0.010	0.05	0	76.5	70	130	0.03657	4.52	20	
cis-1,2-Dichloroethene	0.04804	0.0050	0.05	0	96.1	70	130	0.04949	2.97	20	
cis-1,3-Dichloropropene	0.04613	0.0050	0.05	0	92.3	70	130	0.04648	0.756	20	
Dibromochloromethane	0.04855	0.0050	0.05	0	97.1	70	130	0.04848	0.144	20	
Ethylbenzene	0.04731	0.0050	0.05	0	94.6	70	130	0.04738	0.148	20	
Methyl tert-butyl ether	0.04821	0.0050	0.05	0	96.4	50	150	0.04914	1.91	20	
Methylene chloride	0.04605	0.010	0.05	0.00436	83.4	70	130	0.04532	1.60	20	
Styrene	0.04678	0.0050	0.05	0	93.6	70	130	0.045	3.88	20	
Tetrachloroethene	0.04885	0.0050	0.05	0	97.7	70	130	0.05087	4.05	20	
Toluene	0.04734	0.0050	0.05	0	94.7	70	130	0.04651	1.77	20	
trans-1,2-Dichloroethene	0.04728	0.0050	0.05	0	94.6	70	130	0.04986	5.31	20	
trans-1,3-Dichloropropene	0.05236	0.0050	0.05	0	105	70	130	0.05239	0.0573	20	
Trichloroethene	0.04631	0.0050	0.05	0	92.6	70	130	0.04827	4.14	20	
Vinyl chloride	0.04695	0.0050	0.05	0	93.9	70	130	0.04699	0.0852	20	
Xylenes, Total	0.1471	0.010	0.15	0	98.1	70	130	0.1462	0.586	20	

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order: 0412085

ANALYTICAL QC SUMMARY REPORT

Project: 32088, Willow Street Station- General Iron

BatchID: R15610

Sample ID VBLK120904-2	SampType: MBLK	TestCod	de: VOC_ENC	OR Units: mg/Kg		Prep Da	te:		Run ID: VC	A-2_041209	9A
Client ID: ZZZZZ	Batch ID: R15610	TestN	lo: SW5035/ 8	3260		Analysis Da	ite: 12/9/2	004	SeqNo: 32	0200	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.0050									
1,1,2,2-Tetrachloroethane	ND	0.0050									
1,1,2-Trichloroethane	ND	0.0050									
1,1-Dichloroethane	ND	0.0050									
1,1-Dichloroethene	ND	0.0050									
1,2-Dichloroethane	ND	0.0050									
1,2-Dichloropropane	ND	0.0050									
2-Butanone	ND	0.010									
2-Hexanone	ND	0.010									
4-Methyl-2-pentanone	ND	0.010									
Acetone	ND	0.025									
Benzene	ND	0.0050									
Bromodichloromethane	ND	0.0050									
Bromoform	ND	0.0050									
Bromomethane	ND	0.010									
Carbon disulfide	ND	0.0050									
Carbon tetrachloride	ND	0.0050									
Chlorobenzene	ND	0.0050									
Chloroethane	ND	0.010									
Chloroform	ND	0.0050									
Chloromethane	ND	0.010									
cis-1,2-Dichloroethene	ND	0.0050									
cis-1,3-Dichloropropene	ND	0.0050									
Dibromochloromethane	ND	0.0050									
Ethylbenzene	ND	0.0050									
Methyl tert-butyl ether	ND	0.0050									
Methylene chloride	0.00238	0.010									J
Styrene	ND	0.0050									
Tetrachloroethene	ND	0.0050									
Toluene	ND	0.0050									
trans-1,2-Dichloroethene	ND	0.0050									

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Work Order: 0412085

32088, Willow Street Station-General Iron **Project:**

ANALYTICAL QC SUMMARY REPORT

BatchID: R15610

Sample ID VBLK120904-2 Client ID: ZZZZZ	SampType: MBLK Batch ID: R15610		de: VOC_ENC	5 5		Prep Dat Analysis Da		004	Run ID: VC	_	9A
Analyte	Result	PQL		SPK Ref Val	%REC	·		RPD Ref Val	%RPD	RPDLimit	Qual
Allalyto	result	I QL	Of It value	Of ICICO Val	701 NEO	LOWLININ	- ingritation	7.1 2 1.01 7.01	70111 2	THE DEITH	Quai
trans-1,3-Dichloropropene	ND	0.0050									
Trichloroethene	ND	0.0050									
Vinyl chloride	ND	0.0050									
Xylenes, Total	ND	0.010									

Sample ID VLCS120904-2	SampType: LCS	TestCo	de: VOC_ENC	OR Units: mg/Kg		Prep Da	te:		Run ID: V	OA-2_04120	9A
Client ID: ZZZZZ	Batch ID: R15610	Test	No: SW5035/ 8	3260		Analysis Da	ite: 12/9/2	004	SeqNo: 32	20201	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.05141	0.0050	0.05	0	103	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.04527	0.0050	0.05	0	90.5	70	130	0	0		
1,1,2-Trichloroethane	0.05031	0.0050	0.05	0	101	70	130	0	0		
1,1-Dichloroethane	0.04821	0.0050	0.05	0	96.4	70	130	0	0		
1,1-Dichloroethene	0.0462	0.0050	0.05	0	92.4	70	130	0	0		
1,2-Dichloroethane	0.05042	0.0050	0.05	0	101	70	130	0	0		
1,2-Dichloropropane	0.04786	0.0050	0.05	0	95.7	70	130	0	0		
2-Butanone	0.04835	0.010	0.05	0	96.7	70	130	0	0		
2-Hexanone	0.04643	0.010	0.05	0	92.9	70	130	0	0		
4-Methyl-2-pentanone	0.04772	0.010	0.05	0	95.4	70	130	0	0		
Acetone	0.06134	0.025	0.05	0	123	50	150	0	0		
Benzene	0.04785	0.0050	0.05	0	95.7	70	130	0	0		
Bromodichloromethane	0.04487	0.0050	0.05	0	89.7	70	130	0	0		
Bromoform	0.04953	0.0050	0.05	0	99.1	70	130	0	0		
Bromomethane	0.03888	0.010	0.05	0	77.8	70	130	0	0		
Carbon disulfide	0.06128	0.0050	0.05	0	123	70	130	0	0		
Carbon tetrachloride	0.05034	0.0050	0.05	0	101	70	130	0	0		
Chlorobenzene	0.0495	0.0050	0.05	0	99	70	130	0	0		
Chloroethane	0.04771	0.010	0.05	0	95.4	70	130	0	0		
Chloroform	0.05079	0.0050	0.05	0	102	70	130	0	0		
Chloromethane	0.03919	0.010	0.05	0	78.4	70	130	0	0		
cis-1,2-Dichloroethene	0.04973	0.0050	0.05	0	99.5	70	130	0	0		

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H/HT - Holding Time Exceeded

B - Analyte detected in the associated Method Blanl

Work Order:

0412085

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Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15610

Sample ID VLCS120904-2	SampType: LCS	TestCod	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	e:		Run ID: VO	A-2_041209	PΑ
Client ID: ZZZZZ	Batch ID: R15610	TestN	lo: SW5035/8	260		Analysis Da	te: 12/9/2 0	004	SeqNo: 320	0201	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	0.04831	0.0050	0.05	0	96.6	70	130	0	0		
Dibromochloromethane	0.04942	0.0050	0.05	0	98.8	70	130	0	0		
Ethylbenzene	0.04878	0.0050	0.05	0	97.6	70	130	0	0		
Methyl tert-butyl ether	0.05233	0.0050	0.05	0	105	50	150	0	0		
Methylene chloride	0.04942	0.010	0.05	0.00238	94.1	70	130	0	0		
Styrene	0.04637	0.0050	0.05	0	92.7	70	130	0	0		
Tetrachloroethene	0.05241	0.0050	0.05	0	105	70	130	0	0		
Toluene	0.04803	0.0050	0.05	0	96.1	70	130	0	0		
trans-1,2-Dichloroethene	0.05012	0.0050	0.05	0	100	70	130	0	0		
trans-1,3-Dichloropropene	0.05602	0.0050	0.05	0	112	70	130	0	0		
Trichloroethene	0.0509	0.0050	0.05	0	102	70	130	0	0		
Vinyl chloride	0.04874	0.0050	0.05	0	97.5	70	130	0	0		
				•	400	70	400	0	0		
Xylenes, Total	0.1523	0.010	0.15	0	102	70	130	U	0		
Xylenes, Total Sample ID VLCSD120904-2	0.1523 SampType: LCSD			COR Units: mg/Kg	102	Prep Dat		0		A-2_041209)A
		TestCod		COR Units: mg/Kg			e:)A
Sample ID VLCSD120904-2 Client ID: ZZZZZ	SampType: LCSD	TestCod	de: VOC_ENC	COR Units: mg/Kg		Prep Dat Analysis Da	e:		Run ID: VC		9A Qual
Sample ID VLCSD120904-2 Client ID: ZZZZZ Analyte	SampType: LCSD Batch ID: R15610	TestCoo TestN	de: VOC_ENC	COR Units: mg/Kg		Prep Dat Analysis Da	e: te: 12/9/2 0	004	Run ID: VC SeqNo: 320	0202	
Sample ID VLCSD120904-2 Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane	SampType: LCSD Batch ID: R15610 Result	TestCoo TestN PQL	de: VOC_ENC lo: SW5035/8 SPK value	COR Units: mg/Kg 2260 SPK Ref Val	%REC	Prep Dat Analysis Da LowLimit	e: te: 12/9/2 0 HighLimit	004 RPD Ref Val	Run ID: VC SeqNo: 320 %RPD	0202 RPDLimit	
Sample ID VLCSD120904-2 Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	SampType: LCSD Batch ID: R15610 Result 0.0508	TestCod TestN PQL 0.0050	de: VOC_ENC do: SW5035/8 SPK value	COR Units: mg/Kg 8260 SPK Ref Val	%REC 102	Prep Dat Analysis Da LowLimit 70	e: te: 12/9/20 HighLimit 130	004 RPD Ref Val 0.05141	Run ID: VC SeqNo: 320 %RPD	RPDLimit 20	
Sample ID VLCSD120904-2 Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane	SampType: LCSD Batch ID: R15610 Result 0.0508 0.04109	TestCoo TestN PQL 0.0050 0.0050	de: VOC_ENC do: SW5035/8 SPK value 0.05 0.05	SPK Ref Val	%REC 102 82.2	Prep Dat Analysis Da LowLimit 70 70	e: te: 12/9/20 HighLimit 130 130	004 RPD Ref Val 0.05141 0.04527	Run ID: VC SeqNo: 320 %RPD 1.19 9.68	RPDLimit 20 20	
Sample ID VLCSD120904-2 Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane	SampType: LCSD Batch ID: R15610 Result 0.0508 0.04109 0.04987	TestCod TestN PQL 0.0050 0.0050 0.0050	de: VOC_ENC lo: SW5035/8 SPK value 0.05 0.05 0.05	COR Units: mg/Kg 2260 SPK Ref Val 0 0 0	%REC 102 82.2 99.7	Prep Dat Analysis Da LowLimit 70 70 70	e: te: 12/9/2 0 HighLimit 130 130 130	004 RPD Ref Val 0.05141 0.04527 0.05031	Run ID: VC SeqNo: 320 %RPD 1.19 9.68 0.878	RPDLimit 20 20 20	
Sample ID VLCSD120904-2	SampType: LCSD Batch ID: R15610 Result 0.0508 0.04109 0.04987 0.04885	TestCod TestN PQL 0.0050 0.0050 0.0050 0.0050	de: VOC_ENC do: SW5035/8 SPK value 0.05 0.05 0.05 0.05	COR Units: mg/Kg 2260 SPK Ref Val 0 0 0	%REC 102 82.2 99.7 97.7	Prep Dat Analysis Da LowLimit 70 70 70 70 70	e: te: 12/9/20 HighLimit 130 130 130	004 RPD Ref Val 0.05141 0.04527 0.05031 0.04821	Run ID: VC SeqNo: 320 %RPD 1.19 9.68 0.878 1.32	PPDLimit 20 20 20 20 20 20	
Sample ID VLCSD120904-2 Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane	SampType: LCSD Batch ID: R15610 Result 0.0508 0.04109 0.04987 0.04885 0.04896	TestCod TestN PQL 0.0050 0.0050 0.0050 0.0050 0.0050	de: VOC_ENC do: SW5035/8 SPK value 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0	%REC 102 82.2 99.7 97.7 97.9	Prep Dat Analysis Da LowLimit 70 70 70 70 70 70	e: te: 12/9/20 HighLimit 130 130 130 130	004 RPD Ref Val 0.05141 0.04527 0.05031 0.04821 0.0462	Run ID: VC SeqNo: 320 %RPD 1.19 9.68 0.878 1.32 5.80	RPDLimit 20 20 20 20 20 20 20 20	
Sample ID VLCSD120904-2 Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane	SampType: LCSD Batch ID: R15610 Result 0.0508 0.04109 0.04987 0.04885 0.04896 0.04869	TestCod TestN PQL 0.0050 0.0050 0.0050 0.0050 0.0050	de: VOC_ENC do: SW5035/8 SPK value 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0 0	%REC 102 82.2 99.7 97.7 97.9 97.4	Prep Dat Analysis Da LowLimit 70 70 70 70 70 70 70	e: HighLimit 130 130 130 130 130 130	004 RPD Ref Val 0.05141 0.04527 0.05031 0.04821 0.0462 0.05042	Run ID: VC SeqNo: 320 %RPD 1.19 9.68 0.878 1.32 5.80 3.49	RPDLimit 20 20 20 20 20 20 20 20 20 20	
Sample ID VLCSD120904-2 Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone	SampType: LCSD Batch ID: R15610 Result 0.0508 0.04109 0.04987 0.04885 0.04896 0.04869 0.04556	TestCod TestN PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	de: VOC_ENC lo: SW5035/8 SPK value 0.05 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0 0 0	%REC 102 82.2 99.7 97.7 97.9 97.4 91.1	Prep Dat Analysis Da LowLimit 70 70 70 70 70 70 70 70	e: HighLimit 130 130 130 130 130 130 130	004 RPD Ref Val 0.05141 0.04527 0.05031 0.04821 0.0462 0.05042 0.04786	Run ID: VC SeqNo: 320 %RPD 1.19 9.68 0.878 1.32 5.80 3.49 4.92	RPDLimit 20 20 20 20 20 20 20 20 20 20 20 20	
Sample ID VLCSD120904-2 Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane	SampType: LCSD Batch ID: R15610 Result 0.0508 0.04109 0.04987 0.04885 0.04896 0.04869 0.04556 0.05002	TestCod TestN PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050	de: VOC_ENC lo: SW5035/8 SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05	SPK Ref Val 0 0 0 0 0 0 0 0 0 0	%REC 102 82.2 99.7 97.7 97.9 97.4 91.1 100	Prep Dat Analysis Da LowLimit 70 70 70 70 70 70 70	e: HighLimit 130 130 130 130 130 130 130 130 130 13	004 RPD Ref Val 0.05141 0.04527 0.05031 0.04821 0.0462 0.05042 0.04786 0.04835	Run ID: VC SeqNo: 320 %RPD 1.19 9.68 0.878 1.32 5.80 3.49 4.92 3.40	PDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	
Sample ID VLCSD120904-2 Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone 2-Hexanone 4-Methyl-2-pentanone	SampType: LCSD Batch ID: R15610 Result 0.0508 0.04109 0.04987 0.04885 0.04896 0.04869 0.04556 0.05002 0.04651	TestCod TestN PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0010	de: VOC_ENC lo: SW5035/8 SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.0	SPK Ref Val 0 0 0 0 0 0 0 0 0 0 0 0	%REC 102 82.2 99.7 97.7 97.9 97.4 91.1 100 93	Prep Dat Analysis Da LowLimit 70 70 70 70 70 70 70 70	e: te: 12/9/20 HighLimit 130 130 130 130 130 130 130 130 130 130	004 RPD Ref Val 0.05141 0.04527 0.05031 0.04821 0.0462 0.05042 0.04786 0.04835 0.04643	Run ID: VC SeqNo: 320 %RPD 1.19 9.68 0.878 1.32 5.80 3.49 4.92 3.40 0.172	PDLimit 20 20 20 20 20 20 20 20 20 20 20 20 20	
Sample ID VLCSD120904-2 Client ID: ZZZZZ Analyte 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 2-Butanone 2-Hexanone	SampType: LCSD Batch ID: R15610 Result 0.0508 0.04109 0.04987 0.04885 0.04896 0.04869 0.04556 0.05002 0.04651 0.04368	TestCod TestN PQL 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0050 0.0010 0.010 0.010	de: VOC_ENC lo: SW5035/8 SPK value 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.0	SPK Ref Val 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	%REC 102 82.2 99.7 97.7 97.9 97.4 91.1 100 93 87.4	Prep Dat Analysis Da LowLimit 70 70 70 70 70 70 70 70 70 70 70 70 70	e: te: 12/9/20 HighLimit 130 130 130 130 130 130 130 130 130 130	004 RPD Ref Val 0.05141 0.04527 0.05031 0.04821 0.0462 0.05042 0.04786 0.04835 0.04643 0.04772	Run ID: VC SeqNo: 320 %RPD 1.19 9.68 0.878 1.32 5.80 3.49 4.92 3.40 0.172 8.84	20 20 20 20 20 20 20 20 20 20 20 20 20	

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Work Order: 0412085

Project: 32088, Willow Street Station- General Iron

ANALYTICAL QC SUMMARY REPORT

BatchID: R15610

Sample ID VLCSD120904-2	SampType: LCSD	TestCod	de: VOC_ENC	OR Units: mg/Kg		Prep Dat	e:		Run ID: VO	A-2_041209	A
Client ID: ZZZZZ	Batch ID: R15610	TestN	lo: SW5035/8	260		Analysis Da	te: 12/9/2	004	SeqNo: 320	0202	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.04802	0.0050	0.05	0	96	70	130	0.04953	3.10	20	
Bromomethane	0.03949	0.010	0.05	0	79	70	130	0.03888	1.56	20	
Carbon disulfide	0.06155	0.0050	0.05	0	123	70	130	0.06128	0.440	20	
Carbon tetrachloride	0.04969	0.0050	0.05	0	99.4	70	130	0.05034	1.30	20	
Chlorobenzene	0.04982	0.0050	0.05	0	99.6	70	130	0.0495	0.644	20	
Chloroethane	0.0505	0.010	0.05	0	101	70	130	0.04771	5.68	20	
Chloroform	0.05168	0.0050	0.05	0	103	70	130	0.05079	1.74	20	
Chloromethane	0.03963	0.010	0.05	0	79.3	70	130	0.03919	1.12	20	
cis-1,2-Dichloroethene	0.05004	0.0050	0.05	0	100	70	130	0.04973	0.621	20	
cis-1,3-Dichloropropene	0.04827	0.0050	0.05	0	96.5	70	130	0.04831	0.0828	20	
Dibromochloromethane	0.05138	0.0050	0.05	0	103	70	130	0.04942	3.89	20	
Ethylbenzene	0.05031	0.0050	0.05	0	101	70	130	0.04878	3.09	20	
Methyl tert-butyl ether	0.0521	0.0050	0.05	0	104	50	150	0.05233	0.440	20	
Methylene chloride	0.04734	0.010	0.05	0.00238	89.9	70	130	0.04942	4.30	20	
Styrene	0.04782	0.0050	0.05	0	95.6	70	130	0.04637	3.08	20	
Tetrachloroethene	0.05478	0.0050	0.05	0	110	70	130	0.05241	4.42	20	
Toluene	0.04793	0.0050	0.05	0	95.9	70	130	0.04803	0.208	20	
trans-1,2-Dichloroethene	0.05186	0.0050	0.05	0	104	70	130	0.05012	3.41	20	
trans-1,3-Dichloropropene	0.05329	0.0050	0.05	0	107	70	130	0.05602	4.99	20	
Trichloroethene	0.0516	0.0050	0.05	0	103	70	130	0.0509	1.37	20	
Vinyl chloride	0.05094	0.0050	0.05	0	102	70	130	0.04874	4.41	20	
Xylenes, Total	0.152	0.010	0.15	0	101	70	130	0.1523	0.158	20	

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

H/HT - Holding Time Exceeded

Work Order: 0412085

ANALYTICAL QC SUMMARY REPORT

BatchID: R15540

Project: 32088, Willow Street Station- General Iron

Sample ID	MBLK2	SampType:	MBLK	TestCo	de: PMOIST	Units: wt%		Prep Date:	12/6/200	04	Run ID: B	ALANCE_041	1206C
Client ID:	ZZZZZ	Batch ID:	R15540	TestN	No: D2974			Analysis Date:	12/7/200	04	SeqNo: 3	18596	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit F	lighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Mo	oisture		ND	0.01000									*
Sample ID	LCS-S2	SampType:	LCS	TestCo	de: PMOIST	Units: wt%		Prep Date:	12/6/200	04	Run ID: B	ALANCE_041	1206C
Client ID:	ZZZZZ	Batch ID:	R15540	TestN	No: D2974			Analysis Date	12/7/200	04	SeqNo: 3	18597	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit F	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Mo	oisture		4.39	0.01000	5	0	87.8	80	120	0	C)	*
													=
Sample ID	LCS-W2	SampType:	LCS	TestCo	de: PMOIST	Units: wt%		Prep Date:	12/6/200	04	Run ID: B	ALANCE_041	1206C
Sample ID Client ID:	ZZZZZ	SampType: Batch ID:			de: PMOIST No: D2974	Units: wt%		Prep Date: Analysis Date:			Run ID: B SeqNo: 3	_	1206C
-		. ,,				Units: wt% SPK Ref Val	%REC	Analysis Date	12/7/200			18598	1206C Qual
Client ID:	ZZZZZ	. ,,	R15540	TestN	No: D2974			Analysis Date	12/7/200	04	SeqNo: 3	18598 RPDLimit	
Client ID: Analyte Percent Mo	ZZZZZ	. ,,	R15540 Result 99.82	PQL 0.01000	No: D2974 SPK value	SPK Ref Val	%REC	Analysis Date	: 12/7/200 HighLimit	RPD Ref Val	SeqNo: 3 %RPD	18598 RPDLimit	Qual *
Client ID: Analyte Percent Mo	ZZZZZ pisture	Batch ID: SampType:	R15540 Result 99.82	PQL 0.01000 TestCoo	No: D2974 SPK value 99.8	SPK Ref Val	%REC 100	Analysis Date LowLimit F	12/7/200 HighLimit 120 12/6/200	RPD Ref Val 0	SeqNo: 3 %RPD	RPDLimit	Qual *
Client ID: Analyte Percent Mo	Disture 0412091-002B DUP	Batch ID: SampType:	R15540 Result 99.82 DUP	PQL 0.01000 TestCoo	SPK value 99.8 de: PMOIST	SPK Ref Val	%REC 100	Analysis Date LowLimit H 80 Prep Date:	12/7/200 dighLimit 120 12/6/200 12/7/200	RPD Ref Val 0	SeqNo: 3 %RPD 0 Run ID: B	RPDLimit ALANCE_041 18634	Qual *

J - Analyte detected below quantitation limits

^{* -} Non Accredited Parameter

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

APPENDIX D
WATER WELL SURVEY INFORMATION
THE FORMER WILLOW STREET STATION
MANUFACTURED GAS PLANT SITE,
1640 NORTH KINGSBURY PORTION

FIGURE

LEGEND



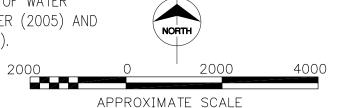
APPROXIMATE WELL LOCATION

WELL LOCATION	WELL ID	OWNER
А	415446087393901	UNKNOWN
B*	GIL 00020627 GIL 00020628 033853	UNKNOWN UNKNOWN PRIMA PRODUCTS
C*	034176 029507 034182 034186 029497 034187 034190 034162 034163	GUTMANN TANNERY CO. BIRK BREWING CO. JEFFERSON ICE CO. PLANT #5 NORTHWEST BREWERY ATLANTIC BREWING CO. PETER HAND BREWERY CO. SPIELMAN BROS. VINEGAR WORK BIRK BREWING CO. BIRK BREWING CO.
D	415455087394501	UNKNOWN
E	0369697 0369692	SIPI METALS SIPI METALS
F	0369693 0369695 0369696	SIPI METALS SIPI METALS SIPI METALS
G	0369694	SIPI METALS
Н	034173	FP SMITH WIRE & IRON WORKS
14	033819	CHICAGO BREWERY CO.

NOTES:

- 1. * BASED ON AVAILABLE INFORMATION, SEVERAL WELLS MAY EXIST AT WELL LOCATIONS B & C.
- 2. DATA OBTAINED FROM:

ILLINOIS STATE WATER SURVEY, ILLINOIS STATE GEOLOGICAL SURVEY, ILLINOIS DEPARTMENT OF PUBLIC HEALTH, CITY OF CHICAGO DEPARTMENT OF PUBLIC HEALTH, COOK COUNTY DEPARTMENT OF PUBLIC HEALTH, CITY OF CHICAGO-DEPARTMENT OF WATER QUALITY, ILLINOIS EPA-BUREAU OF WATER (2005) AND ENVIRONMENTAL DATA-RESOURCES (2003).



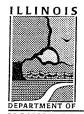


THE PEOPLES GAS LIGHT AND COKE COMPANY **CHICAGO, ILLINOIS**

Figure D-1

SURROUNDING AREA WELL LOCATION MAP FORMER WILLOW STREET STATION 1640 NORTH KINGSBURY PORTION CHICAGO, ILLINOIS





Illinois State Water Survey

Main Office • 2204 Griffith Drive • Champaign, IL 61820-7495 • Tel (217) 333-2210 • Fax (217) 333-6540

Peoria Office • PO. Box 697 • Peoria, IL 61652-0697 • Tel (309) 671-3196 • Fax (309) 671-3106



Burns & McDonnell Oak Brook, IL

NATURAL RESOURCES

5/4/2005

Ms. Amy Hanrahan Burns & McDonnell 1431 Opus Place, Suite 400 Downers Grove, IL 60515

Dear Ms. Hanrahan:

As you requested during our telephone conversation on May 04, 2005, we are enclosing printouts from our Private Well Database and Public, Industrial, Commercial Survey (PICS) Database for the following locations:

<u>COUNTY</u>	TOWNSHIP	RANGE	SECTIONS
COOK	40 NORTH	14 EAST	32

No available information is indicated on the printout by the statement "0 records were found for the specified locations." Also enclosed are explanations of the Illinois State Water Survey Private Well and PICS Databases.

The data included in the Private Well Database are those non-municipal wells which are known to the Illinois State Water Survey, and the PICS Database is an inventory of municipal well information and large industrial groundwater users. We may not have a copy of well records for these groundwater users.

The enclosed statement reflects the charges for this request which includes a \$35.00 query fee for PICS information, a \$35.00 query fee for Private well information, and a \$0.10 per page charge for 4 pages, plus a \$5.00 shipping and handling fee, totaling \$75.40.

If you have any questions or if I can be of further assistance, please call

Sincerely,

Susie Dodd-Casey

Associate Supportive Scientist

Center for Groundwater Science

Phone: (217) 333-9043

Enclosures as stated

ILLINOIS STATE WATER SURVEY PICS DATABASE EXPLANATION

SWS ID

ISWS Facility ID Number

NAME

Facility Name

WELL#

ISWS Point Source Well/Intake Number

STATUS

Point Source Status of Well/Intake

A = Abandoned - no longer in existence, no affidavit on file, or

do not know if it has been filled in

C = Capped - cap attached to top

D = Disconnected - disconnected from system
E = Emergency - available for standby use
I = In Use - produces major portion of water

O = Observation - used for water level measurements

S = Sealed - filled in

U = Unused - exists but not used

FIPS

County Code Number

TWN

Civil Township

RNG

Range

SEC

Section

PLOT

10-acre Plot Location within the Section

DEPTH

Depth (well to nearest ft)

TYPE LOG

D = Driller's log

O = OtherX = Chemical

C = Correlated log
S = Sample study log

- = Log not available

YEAR

Year Point Source Initially Constructed

DRILLER

Well Drilling Contractor of Well

ISWS 10-ACRE PLOT LOCATION SYSTEM

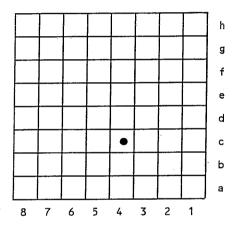
The following is an explanation of the ISWS Private Well Database location system.

The location system uses Township, Range, and Section. The location consists of five parts: County abbreviation, Township, Range, Section, and coordinate within the section (subsection or 10-acre plot). Sections are divided into rows of 1/8-mile squares. Each 1/8-mile square contains 10 acres and corresponds to a quarter of a quarter of a quarter section. A normal section of 1 square mile contains 8 rows of 1/8-mile squares; an odd-sized section contains more or fewer rows. Rows are numbered from east to west and lettered from south to north as shown in the diagram.

Example:

St. Clair County, FIP No. 163

T2N, R10W Section 23



The location of the well shown above is 163 2N10W-23.4c. The well point is located at the center of this 10-acre plot.

ILLINOIS STATE WATER SURVEY PRIVATE WELL DATABASE EXPLANATION

WID

Illinois State Water Survey Identification Number

FIPS

County Code Number

TWN

Civil Township

RNG

Range

SEC

Section

PLOT

10-acre Plot Location within the Section

OWNER

Well Owner

DRILLER

Well Drilling Contractor of Well

DATE DRILLED

Date Initially Drilled

DEPTH

Depth (well to nearest ft)

RECORD TYPE

Record Type (types of information on file)

R - Construction Report

G - Geology

S - Sealed

A - Affidavit

C - Chemical Analysis

I - Inventory

X - Indicates Comment in Owners Field Something Unusual

O - Any Other Type of Record

P - Pump Installation

USE

Well Use (two-letter code indicating the usage of the well)

CO - Conservation

CS - Community Supply

DO - Domestic

DW - De-Watering

IC - Industrial/Commercial

IN - Injection Well

IR - Irrigation

MO - Monitoring

NC - Non-Community

NW - Non-Well Source

OB - Observation

PK - Park

RC - Recovery Well

RW - Relief Well

SC - School

ST - State

USE

(Continued)

TB - Test Boring
TH - Test Hole
TW - Test Well
~ - Unknown

WELL TYPE

Well Type (two-letter code indicating the type of well)

BLANK - Assumed Drilled

BD - Bored DL - Drilled

DU - Dug (Being Phased Out)

DR - Driven
NW - Non-Well
SP - Sand Point
SG - Spring

- Assumed Drilled or Possibly Unknown

AQUIFER TYPE

Aquifer Type (two-letter code indicating aquifer type)

BR - Bedrock
DH - Dry Hole
SW - Surface Water
UN - Unconsolidated
~ - Unknown

STAT LVL PUMP LVL PUMP GPM Static Level - Reported non-pumping water level

Pumping Level - Reported water level during initial pumping of the well

Pumping GPM - Gallons per minute at time of well construction

THE DATA IN THE PRIVATE WELL DATABASE IS A LISTING OF THE NON-COMMUNITY WELLS WHICH ARE KNOWN TO THE ILLINOIS STATE WATER SURVEY (ISWS). THIS INFORMATION HAS BEEN ENTERED VERBATIM FROM WELL LOGS SUBMITTED BY THE DRILLER, FROM CHEMICAL ANALYSIS REPORTS, FROM WELL SEALING FORMS, OR WELL INVENTORY FORMS FROM THE 1930-34 WELL SURVEY AND OTHER SPECIAL PROJECTS. THE ACCURACY OF THIS DATA IS CONTROLLED BY THOSE WHO SUBMITTED THE FORM. INFORMATION IN THE PRIVATE WELL DATABASE HAS NOT BEEN VERIFIED.

Illinois State Water Survey Private Well Database

Wednesday, May 4, 2005

County:

COOK

Township: 40N

Range:

14E

Sections: 32

1011S. 3Z

Records Found: 21

Questions:

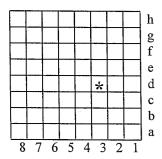
Contact the Illinois State Water Survey's Ground Water Division @ (217)-333-9043

Publication:

Please cite the Illinois State Water Survey's Private Well Database in all publications based wholly or partially on this information.

Note: The data in the Private Well Database is a listing of non-municipal wells which are known to the Illinois State Water Survey (ISWS). This information has been entered verbatim from well logs submitted by the driller, chemical analysis reports, well sealing forms, well inventory forms from the 1930-1934 well survey, and other special projects. The accuracy of this data is controlled by those submitting the forms. Information in the Private Well Database has not been verified.

This data cannot be resold or redistributed. The Illinois State Water Survey must be acknowledged in any use of this material.



Location of a 10-acre-plot within a section:

The origin can be found at the lower right-hand-corner of an 8 x 8 grid. In this example, the well is in the 10-acre plot '3d'.

<u>D</u>	FIPS	TWN	RNG	SEC	PLOT	OWNER	DRILLER	DRILL DATE		RECORI			AQ STAT TYPE LVL	PUMP LVL	PUMP GPM
176	031	40N	14E	32		GUTMANN TANNERY CO		00/00/190	0 990	СО	IC		BR		
187	031	40N	14E	32		PETER HAND BREWERY CO	J P MILLER	00/00/190	5 1972	СО	IC	T-10040 minutes from 1 malana area.	BR		
190	031	40N	14E	32		SPIELMAN BROS VINEGAR WORKS	J P MILLER	05/00/189	9 1590	OGC	IC		BR		
502	031	40N	14E	32	112 20	BIRK BREWING CO/CORPER & NOCKI	J P MILLER	06/00/189	9 1565	О	IC		BR		
497	031	40N	14E	32		ATLANTIC BREWING CO/PAUL POHL	J P MILLER	00/00/180	0 1304	O	IC		BR		
182	031	40N	14E	32		JEFFERSON ICE CO PLANT #5	MILLER BROS	00/00/189	5 1616	O	IC		BR		
186	031	40N	14E	32		NORTHWEST BREWERY	J P MILLER	00/00/189	7 1302	О	IC		BR		
173	031	40N	14E	32	1H	F P SMITH WIRE & IRON WORKS	GEIGER	00/00/189	7 240	OGC	IC		BR		
6058	031	40N	14E	32	4B	GI NORTH PROPERTY LLC #MW-01	ROCK & SOIL DRILLING/DEREK	02/18/200	2 18	RG	MC	DL	UN		
6059	031	40N	14E	32	4B	GI NORTH PROPERTY LLC #MW-02	ROCK & SOIL DRILLING	02/14/200	2 18	RG	MC	DL	U		
6060	031	40N	14E	32	4B	GI NORTH PROPERTY LLD #MW-03	ROCK & SOIL DRILLING/DEREK	02/18/200	2 20	RG	MC) DL	UN		
16061	031	40N	14E	32	4B	GI NORTH PROPERTY LLC #MW-04	ROCK & SOIL DRILLING	02/14/200	02 20	RG	MC) DL	UN		
16062	2 031	40N	14E	32	4B	GI NORTH PROPERTY LLC #MW-05	ROCK & SOIL DRILLING	02/15/200)2 20	RG	MC	DL	UN		
1162	031	40N	14E	32	6F	BIRK BREWING CO	GEIGER	09/00/194	13 1590	OGR	IC		BR		
1163	031	40N	14E	32	6F	BIRK BREWING CO	J P MILLER	00/00/189	93 1610	OG	IC	···.	BR		

<u>D</u>	FIPS	TWN	RNG	SEC	PLOT	OWNER	DRILLER	DRILL DATE DE		ECORI TYPE			AQ S		PUMP LVL	PUMP GPM
9697	031	40N	14E	32	7A	SIPI METALS #MW-6	C S DRILLING/M. NOTOLI	08/11/2004 1	14	RG	МО	DL	UN	•		
9695	031	40N	14E	32	7B	SIPI METALS #MW-4	C SS DDRILLING/M. NOTOLI	08/10/2004 1	15	RG	МО	DL	UN		,	***************************************
9696	031	40N	14E	32	7B	SIPI METALS #MW-5	C SS DRILLING/M. NOTOLI	08/11/2004 1	15	RG	МО	DL	UN			****
9692	2 031	40N	14E	32	7B	SIPI METALS #MW-1	CS DRILLING/M. NOTOLI	08/10/2004 1	14	RG	МО	DL	UN			
9693	3 031	40N	14E	32	7B	SIPI METAL #MW-2	C DRILLING/M. NOTOLI	08/09/2004 1	15	RG	МО	DL	UN			
9694	1 031	40N	14E	32	7C	SIPI METALS #MW-3	C DRILLING/M. NOTOLI	08/09/2004 1	15	RG	МО	DL	UN			

Illinois State Water Survey PICS Database

Wednesday, May 4, 2005

County:

COOK

Township: 40N

Range:

14E

Sections: 32

Records Found: 0

Questions:

Contact the Illinois State Water Survey's Ground Water Division @ (217)-333-9043

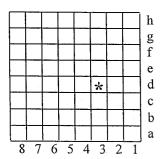
Publication:

Please cite the Illinois State Water Survey's PICS (Public-industrial-Commercial) Database in all publications based wholly or partially

on this information.

Note: The data in the PICS Database is a listing of municipal and commercial wells which are known to the Illinois State Water Survey (ISWS). This information was initially entered from public water supply data and supplemented with the Illinois State Water Inventory Project data This database is updated as additional information is received and verified.

This data cannot be resold or redistributed. The Illinois State Water Survey must be acknowledged in any use of this material.



Location of a 10-acre-plot within a section:

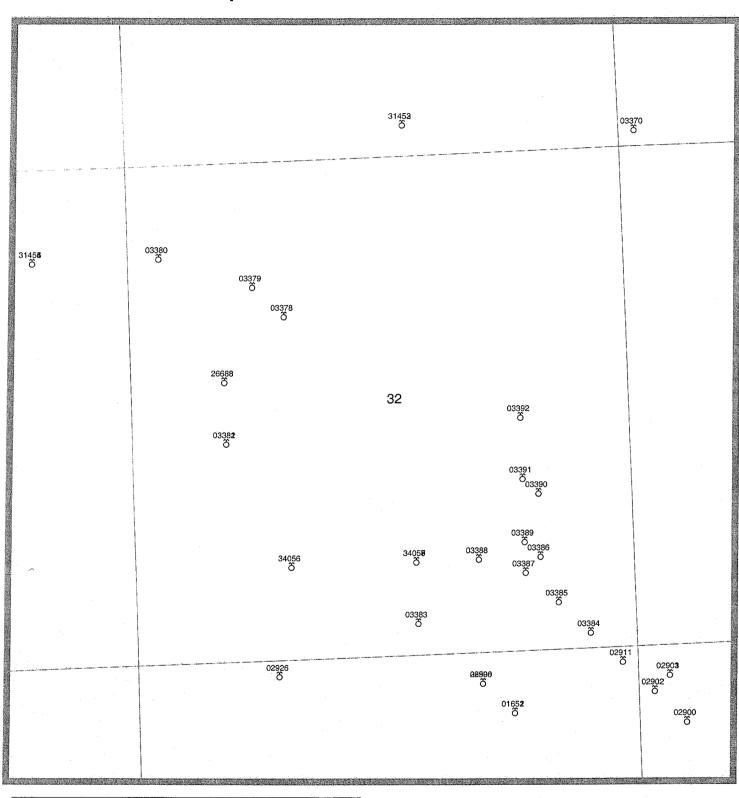
The origin can be found at the lower right-hand-corner of an 8 x 8 grid. In this example, the well is in the 10-acre plot '3d'.

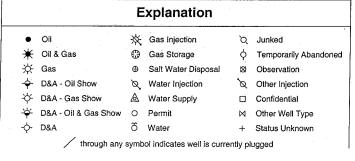
WELL YEAR

DB ID # DEPTH STATUS SEALED TYPE YEAR DRILLER



Map Area: 39N-14E-6 m3 to 40N-14E-28 m3







o _	1018	2036 ft
Illin	ois State Geolog	ical Survey
QuE	StoR: Custo	m Map
Date: 05	-MAY-05 Scale: 1	:12216

Displayed data is based upon information supplied to the Illinois State Geological Survey (ISGS) and are not field verified. The ISGS

QuEStoR Data Extraction DB: oradb

Non Oil and Gas - Wells

4-39N-14E 120310290000 Chicago Dept. of Subways

P-73 Subway Boring Cook

165 NL 165 EL SW NW NW permit date: Elev: 593GL Status: ENG comp. date: 04/01/39 permit: 0

td: 55

Lambert X: 3502439 Lambert Y: 3235687 producing formation: td format td formation:

latitude: 41.908610 longitude: 87.646271

4-39N-14E 120310290100 Chicago Dept. of Subways

Cook Subway Boring

Elev: 593GL NW NW NW Status: ENG comp. date: 04/01/39

permit date: permit: 0 td: 55

Lambert Y: 3236174 Lambert X: 3502260

producing formation: td formation: producing formation: td formation: latitude: 41.909962 longitude: 87.646894

4-39N-14E 120310290200 Chicago Dept. of Subways

P-75

NW NW NW Elev: 593GL comp. date: 04/01/39

td: 55

Cook Subway Boring
Status: ENG 165 SL 165 WL NW NW permit: 0 permit date:
Lambert X: 3502108 Lambert Y: 3236003 producing formation: td forma td formation: producing formation: td formation: latitude: 41.909499 longitude: 87.647468

P-76 4-39N-14E 120310290300 Chicago Dept. of Subways

Subway Boring Cook

Status: ENG Elev: 593GL NW NW NW

comp. date: 04/01/39

permit: 0 permit date:
Lambert X: 3502260 Lambert Y: 3236174 td: 55

producing formation: td formation: latitude: 41.909962 longitude: 87.646894

5-39N-14E 120310290600 Chicago Pub. Works Dept.

Chgo Pub Wks Dept Cook

NE NW NE Elev: 593GL Status: ENG comp. date: 01/01/27

permit: 0 permit date:
Lambert X: 3500291 Lambert Y: 3236092 td: 78

producing formation: td formation: latitude: 41.909846 longitude: 87.654163

5-39N-14E 120310165200 Geiger, S. B. Co.

1 Fleischmann Yeast Cook

Status: WATER N2 NE Elev: 590TM

comp. date: 01/01/27 permit date: permit: 0 td: 1965

Lambert X: 3500633 Lambert Y: 3235777 producing formation: td formation: latitude: 41.908959 longitude: 87.652925

5-39N-14E Layne Bowler Co 120310165100

Fleischmann Yeast Cook

Elev: 590TM Status: WATER N2 NE comp. date: 01/01/25

permit: 0 permit date:
Lambert X: 3500633 Lambert Y: 3235777 td: 1962

td formation: producing formation:

producing formation: td formation: latitude: 41.908959 tongitude: 87.652925

5-39N-14E Chicago Pub. Works Dept. 120312659000 Re-4 St Bulkhead Walls Cook

NE NW NE Elev: 592GL Status: ENG

comp. date: 03/01/61 permit: 0 permit date:
Lambert X: 3500291 Lambert Y: 3236092 td: 70

producing formation: td formation: latitude: 41.909846 longitude: 87.654163

5-39N-14E 120310291100 Chicago Dept. of Subways P-77

Subway Boring Cook

Elev:

comp. date: 04/01/39

td: 55

Status: ENG 165 NL 165 EL NE NE NE permit: 0 permit date:
Lambert X: 3501766 Lambert Y: 3236317 producing formation: td formation: latitude: 41.910384 longitude: 87.648706

5-39N-14E

120310292600 Chicago Dept. of Subways
Cook Subway Boring
Status: ENG 165 NL 165 WL NW NE 1
permit: 0 permit date: R-5A Elev: 592GL NW NE NW Lambert X: 3498144 Lambart producing for permit: 0 permit date:
Lambert X: 3498144 Lambert Y: 3236168
producing formation:
latitude: 41.910176 longitude: 87.662077 comp. date: 04/01/39 td: 35

28-40N-14E

B-2

Elev: 586GL comp. date: 06/01/40

td: 75

120310337000 Chicago Dept. of Subways
Cook Subway Boring
Status: ENG 165 SL 165 WL SE SE SE
permit: 0 permit date:
Lambert X: 3501829 Lambert Y: 3241926
producing formation: td formation:
latitude: 41.925835 longitude: 87.648052

29-40N-14E Galien, Vander Sam 29-401 MW-1A Elev: 596GL 120313145200

Amoco Oil Co. Cook

Status: MONIT SW SW SE

comp. date: 01/30/92 Lambert X: 3499368 Lambert V td: 14

Lambert X: 3499368 Lambert Y: 3241992 producing formation: td formation: latitude: 41.926154 longitude: 87.657126

29-40N-14E

120313145300 Galien, Vander Sam RW-1Amoco Oil Co. Cook

SW SW SE permit: none permit date:
Lambert X: 3499368 Lambert Y: 3241992 producing formation: latitude: 41 00015 Elev: 596GL comp. date: 01/30/92

td: 15

producing formation: td formation: latitude: 41.926154 longitude: 87.657126

31-40N-14E MW-2 Testing Service Corp. 120313145400

Mayfair Const. Co. Cook SW NE NE Elev: Status: MONIT

comp. date: 12/07/92 td: 20 permit date: Lambert X: 3495486 Lambert X: 3495486 Lambert Y: 3240520 producing formation: td formation: latitude: 41.922315 longitude: 87.671558

MW-8 Testing Service Corp. 31-40N-14E 120313145500

Mayfair Const. Co. Elev: Cook Status: MONIT permit: none SW NE NE comp. date: 12/07/92

permit: none permit date:
Lambert X: 3495486 Lambert Y: 3240520 td: 20

td formation: producing formation: producing formation: td formation: latitude: 41.922315 longitude: 87.671558

Testing Service Corp. 31-4
Mayfair Const. Co. MW-9
SW NE NE Elev: 0 31-40N-14E 120313145600 Cook Status: MONIT SW NE NI permit: none permit date:
Lambert X: 3495486 Lambert Y: 3240520 comp. date: 12/08/92 td: 18 producing formation: td formation: latitude: 41.922315 longitude: 87.671558 120310337800 Geiger, S. B. Co.
Cook Birk Bros Brew 32-40N-14E Elev: 597GL Status: WATER NW SE NW permit: 0 permit date:
Lambert X: 3498145 Lambert Y: 3239962
producing formation: td formation:
latitude: 41.920629 longitude: 87.661790 comp. date: 01/01/43 td: 1600 32-40N-14E 120310337900 Miller, J. P. Art. Well Birk Bros Brew Cook Elev: 0 NW Status: WATER permit date: comp. date: Lambert Y: 3240278 td: 1610 permit date: permit: Lambert X: 3497804 producing formation: td formation: latitude: 41.921519 longitude: 87.663024 32-40N-14E 120310338300 Chicago Pub. Works Dept. 32-4 Cook Chgo Pub Wks Dept 0585 Status: ENG SW SW SE Elev: 0 Status: ENG SW SW SE comp. date: 01/01/27 permit: 0 permit date:

Lambert X: 3499604 Lambert Y: 3236723

producing formation: td formation:
latitude: 41.911623 longitude: 87.656650 td: 72 32-40N-14E Chicago Pub. Works Dept. 120310338000 Chgo Pub Wks Dept Cook Status: ENG Elev: 583GL SW NW NW comp. date: 01/01/27 permit: 0 permit date:
Lambert X: 3496807 Lambert Y: 3240568
producing formation: td formation:
latitude: 41.922374 longitude: 87.666681 td: 71 latitude: 41.922374 32-40N-14E 120310338200 Chicago Pub. Works Dept. Chgo Pub Wks Dept Cook Status: ENG Elev: 585GL NE NW SW permit: 0 permit date:
Lambert X: 3497545 Lambert Y: 3238618 comp. date: 01/01/27 td: 64 producing formation: td formation: latitude: 41.916960 longitude: 87.664104 td formation: 32-40N-14E Chicago Pub. Works Dept. 120310338100 Chgo Pub Wks Dept Cook Elev: 586GL NE NW SW Status: ENG comp. date: 01/01/27 permit: 0 permit date:
Lambert X: 3497545 Lambert Y: 3238618
producing formation:
latitude: 41.916960 longitude: 87.664104 td: 62 120313405700 Rock & Soil Drilling Corp.

32-40N-14E MW-03 Elev: 0 GI North Property LLC Cook Status: MONIT NW SW SE Lambert X: 3499575 producing for comp. date: 02/18/02 Lambert Y: 3237381 td: 20 td formation: producing formation: longitude: 87.656708

latitude: 41.913438

MW-04 32-40N-14E 120313405800 Rock & Soil Drilling Corp. GI North Property LLC Cook Elev: NW SW SE Status: MONIT permit date: comp. date: 02/14/02 permit: Lambert Y: 3237381 td: 20 Lambert X: 3499575 producing formation: td formation: latitude: 41.913438 longitude: 87.656708 32-40N-14E Rock & Soil Drilling Corp. 120313405900 MW - 0.5GI North Property LLC Cook Elev: NW SW SE Status: MONIT comp. date: 02/15/02 permit date: permit: Lambert Y: 3237381 td: 20 Lambert X: 3499575 td formation: producing formation: longitude: 87.656708 latitude: 41.913438 32-40N-14E Rock & Soil Drilling Corp. 120313405500 MW01 GI North Property LLC Cook Ω NW SW SE Elev: Status: MONIT comp. date: 02/18/02 permit date: permit: Lambert Y: 3237381 td: 18 Lambert X: 3499575 td formation: producing formation: longitude: 87.656708 latitude: 41.913438 32-40N-14E Rock & Soil Drilling Corp. 120313405600 MW02 GI North Property LLC Cook 0 Elev: NW SE SW Status: MONIT comp. date: 02/14/02 permit date: producing formation: latitude: 41 01227 permit: td: 18 td formation: latitude: 41.913363 longitude: 87.661566 32-40N-14EChicago Pub. Works Dept. 120312668800 Re-2St Bulkhd Walls Cook Elev: 590GL SE SW NW Status: ENG comp. date: 03/01/61 permit date: permit: 0 Lambert Y: 3239277 td: 86 Lambert X: 3497518 td formation: producing formation: longitude: 87.664154 latitude: 41.918777 32-40N-14E Chicago Dept. of Subways 120310338400 P-78 Subway Boring 593GL Elev: SE SE SE 165 SL 165 WL Status: ENG permit date: comp. date: 01/01/39 permit: 0 Lambert Y: 3236633 55 td: Lambert X: 3501423 td formation: producing formation: longitude: 87.649947 latitude: 41.911274 32-40N-14E Chicago Dept. of Subways 120310338500 P-79 Subway Boring Cook 593GL Elev: SW SE SE 165 NL 165 EL Status: ENG comp. date: 04/01/39 producing formation: latitude: 41 912161

Lambert Y: 3236948 permit date: td: 55 td formation: longitude: 87.651196 32-40N-14E Chicago Dept. of Subways 120310338600 P - 80Subway Boring Cook 593GL

-4-

permit date:

Lambert Y: 3237436

Status: ENG

Lambert X: 3500890

permit: 0

NW SE SE

Elev:

td:

comp. date: 04/01/39

55

producing formation: latitude: 41.913516

td formation: longitude: 87.651853

120310338700 Chicago Dept. of Subways 32-40N-14E

Cook Subway Boring P-81

Status: ENG 165 SL 165 WL NW SE SE Elev: 593GL permit: 0 permit date: comp. date: 04/01/39

Lambert Y: 3237264 td: 49

producing formation: td formation: latitude: 41.913051 longitude: 87.652441

120310338800 Chicago Dept. of Subways 32-40N-14E

Cook Subway Boring P-82

Status: ENG NE SW SE Elev: 593GL

permit: 0 permit date: comp. date: 05/01/39

Lambert X: 3500232 Lambert Y: 3237408 td: 55

producing formation: td formation: latitude: 41.913476 longitude: 87.654282

120310338900 Chicago Dept. of Subways 32-40N-14E

Cook Subway Boring P-83
Status: ENG 165 NL 165 WL NW SE SE Elev: 595GL

Status: ENG 165 NL 165 WL NW SE SE Elev: 595GL permit: 0 permit date: comp. date: 04/01/39

Lambert X: 3500718 Lambert Y: 3237593 td: 55 producing formation: td formation:

latitude: 41.913958 longitude: 87.652476

120310339000 Chicago Dept. of Subways 32-40N-14E

Cook Subway Boring P-84

Status: ENG SW NE SE Elev: 594GL

permit: 0 permit date: comp. date: 05/01/39

Lambert X: 3500860 Lambert Y: 3238094 td: 55
producing formation: td formation:

latitude: 41.915331 longitude: 87.651914

120310339100 Chicago Dept. of Subways 32-40N-14E

Cook Subway Boring P-94
Status: ENG 165 NL 165 WL SW NE SE Elev: 594GL

Status: ENG 165 NL 165 WL SW NE SE ETEV: 594GL permit: 0 permit date: comp. date: 12/01/40

Lambert X: 3500688 Lambert Y: 3238252 td: 21

producing formation:

latitude: 41.915776

lambert 1: 3236232

td. 21

producing formation:

longitude: 87.652537

120310339200 Chicago Dept. of Subways 32-40N-14E

120310339200 Chicago Dept. of Subways 32-40N-14E
Cook Subway Boring P-95
Status: ENG 165 NI, 165 WI. NW NE SE Elev: 595GL

Status: ENG 165 NL 165 WL NW NE SE Elev: 595GL permit: 0 permit date: comp. date: 12/01/40

producing formation: td formation: latitude: 41.917590 longitude: 87.652598

ILLINOIS DEPARTMENT OF PUBLIC HEALTH





Rod R. Blagojevich, Governor Eric E Whitaker, M.D., M.P.H., Director

525-535 West Jefferson Street • Springfield, Illinois 62761-0001 • www.idph.state.il.us

MEMORANDUM

TO:

Amy Hannahan

Burns & McDonnell

FROM:

Elaine Beard

Division of Environmental Health

DATE:

May 4, 2005

SUBJECT:

FOIA Request

The Environmental Engineering Section's files have been searched and found no information regarding the attached request.

FOIA REQUEST MUST BE GO THROUGH OUR DIVISION OF COMMUNICATIONS.

Send all future requests of this type to:

Illinois Department of Public Health Division of Communications 535 W. Jefferson St. Springfield, IL 62761 or fax it to then

or fax it to them at 217-782-3987

Do not fax directly to the Division of Environmental Health



May 4, 2005

Ms. Jamie Tosetti Illinois Department of Public Health Office of Health Protection – Environmental Health 535 West Jefferson Street Springfield, Illinois 62761-0001

VIA Fax: 217-557-1188

RE:

Freedom of Information Act Request

Peoples Gas - Former Willow Street Station

Dear Ms. Tosetti,

This letter is a request under the Freedom of Information Act for information regarding injection wells, withdrawal wells, regulated recharge areas, and modeled recharge areas within 1,000 feet of the property listed below.

SITE NAME

Peoples Gas - Former Willow Street Station

LOCATION OF SITE:

Site Address: 1640 North Kingsbury Street, Chicago, Illinois 60614

County: Cook County

Section: SE 1/4 of Section 32

Township: Township 40 North

Range: Range 14 East

Attached is a map illustrating the location of the site.

purata

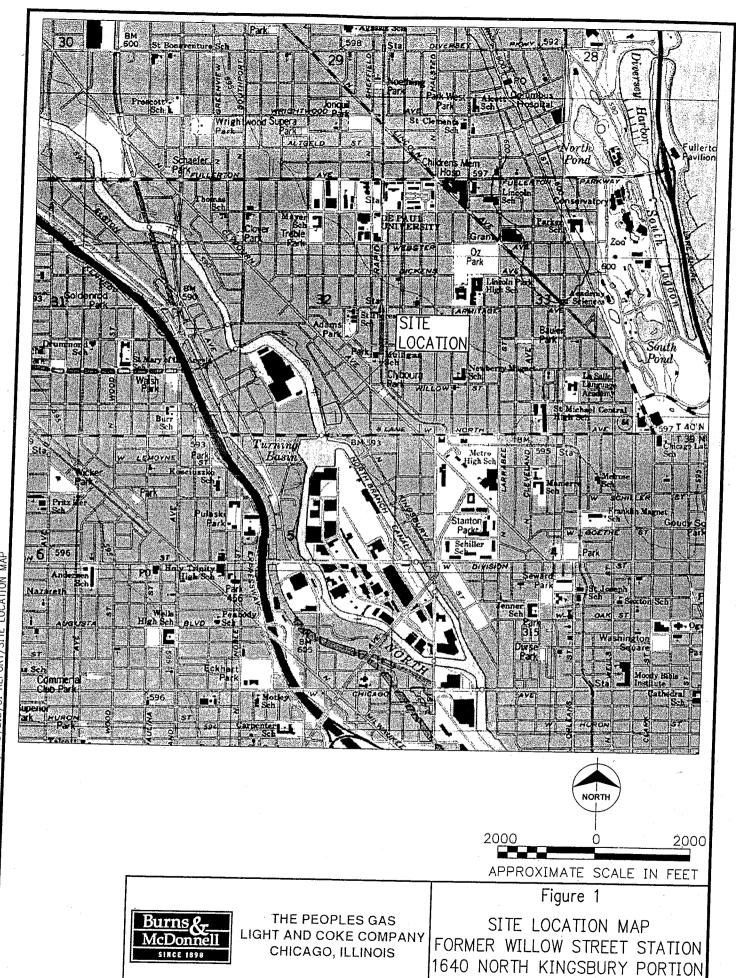
Please send the requested information to my attention at the address indicated on the letterhead. If there are costs associated with the copying of documents and document searches that exceed \$25.00, or if you have any questions regarding this request, please contact the undersigned (630) 724-3255.

Sincerely,

Amy Hanrahan

Environmental Engineer

Attachment



CHICAGO, ILLINOIS

COOK COUNTY DEPARTMENT OF PUBLIC HEALTH

Telephone Call	Memo
Barron Micalled Disalling Mill Problem	Date 5/5/05 Time 10:15AM PM Phone No. (708, 492 - 2035
Person A called Calling Dave Pohbock Representing: Cook County Hoth Departs	Ment Info. Acct.
Project Name: Millow	Project No32088
Contract Name	Contract No.
RE: He does not do any u	later well permits,
the only gets involved will is discovered.	if an unknown
Will 15 CH COVEREDI.	
N 31 0	

Signed Burns & McDonnell SINCE 1898

Page _____ of ____

CITY OF CHICAGO DEPARTMENT OF PUBLIC HEALTH

Date 5/4/05 Time 3:30AM (PA	
Person A Called Calling Department of Public Phone No. 312, 747 9889 Representing: City of Chicago Hath Info. Acct.	Í
Representing: Cuty of Chicago Harri Info. Acct.	_
Project Name: Peoples - Willow Project No. 38088	
Contract Name Contract No	
Public Health. all water issues are handled through the City of Chicago Department of Lutter Moragement.	— Д
	_
	—
Signed (MA) Page of	

Telephone Call Memo

083099 Form GCO-19

CITY OF CHICAGO – DIVISION OF WATER QUALITY

·	Telephone Call	Memo	
	•	Date 5/5/05	5 Time 10:30AMPM
Barran Mariad Palling Me	lencill	Phone No. 3Q1	744-8190
Person A called Chicago	3-libler ain	listed and	
Person Dalled Calling Joe A Representing City of Chicago Project Name: People William	Did	Project No. 3308	8
•			
Contract Name		Contract No.	
RE:			
the city of c	nicago t	as no p	oblic
Sipply wells		to the	State
for private w	ell inform	tion becau	150 the
city does not	have th	nose record	S.
•			
			-
,			
		MARKET IN COLUMN TO THE PARTY OF THE PARTY O	
Janu Home	(aha)		

Burns & McDonnell





Illinois Environmental Protection Agency

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276, 217-782-3397

JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601, 312-814-6026

ROD R. BLAGOJEVICH, GOVERNOR

RENEE CIPRIANO, DIRECTOR

MAY 2 3 2005

5/18/2005

Phone: 217/782-8482 Fax: 217/782-9891

Burns & McDonnell

E-mail: janet.christer@epa.state.PrisBrook, IL

Amy Hanrahan Burns & McDonnell 1431 Opus Place, Suite 400 Downers Grove, IL 60515

Request information regarding location of community water supply wells in Cook County, IL (FOIA NO: 2005-1178)

Dear Amy Hanrahan:

The FOIA Sector, Bureau of Water has processed your request dated 05/4/2005 for public records pursuant to the Freedom of Information Act ("FOIA") (5ILCS 140/1 et. Seq.).

You requested information from Public Water Supplies pertaining to the nearest community water supply wells located in the SE ¼ of Section 32, T40N, R14E. Based upon the information provided, the project area appears to be located outside 2500 feet from a community water supply well.

Effective September 1st, 2001, the Pleasant Valley Public Water District, in Peoria County, is the first and the only regulated recharge area to designate a defined area with specific regulations in place for the area contributing groundwater to its public water supply wells pursuant to section 17.3 of the Illinois Environmental Protection Act (Act). Further, Class III Special Resource Groundwater Designations are Parker Fen in McHenry County, Fogelpole Cave in Monroe County, and soon, Boone Creek Fen, Spring Hollow, Lee Miglin Savanna and Amberin Ash Ridge in central McHenry County.

The Illinois Department of Public Health should be contacted at (217) 782-5830 in regards to the regulations concerning private, semi-private or non-community public water supply wells and the Illinois State Water Survey should be contacted at (217) 333-9043 in regards to the location of these wells.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276, 217-782-3397 JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601, 312-814-6026

ROD R. BLAGOJEVICH, GOVERNOR

RENEE CIPRIANO, DIRECTOR

I trust that this meets your needs. Should you require any further information, please feel free to contact me at the above referenced number.

Sincerely,

Janet Christer

FOIA Coordinator, Bureau of Water

uet Christin

cc:

File



May 4, 2005

Ms. Janet Christer IEPA, Bureau of Water Division of Public Water Supplies #13 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276

VIA Fax: 217-782-0075

RE:

Freedom of Information Act Request

Peoples Gas - Former Willow Street Station

Dear Ms. Christer,

This letter is a request under the Freedom of Information Act for information regarding injection wells, withdrawal wells, regulated recharge areas, and modeled recharge areas within 1,000 feet of the property listed below.

SITE NAME

Peoples Gas - Former Willow Street Station

LOCATION OF SITE:

Site Address: 1640 North Kingsbury Street, Chicago, Illinois 60614

County: Cook County

Section: SE ¼ of Section 32

Township: Township 40 North

Range: Range 14 East

Attached is a map illustrating the location of the site.

Please send the requested information to:

Amy Hanrahan Burns & McDonnell 1431 Opus Place, Suite 400 Downers Grove, Illinois 60515

tomakan

If you have any questions regarding this request, please contact the undersigned (630) 724-3255.

Sincerely,

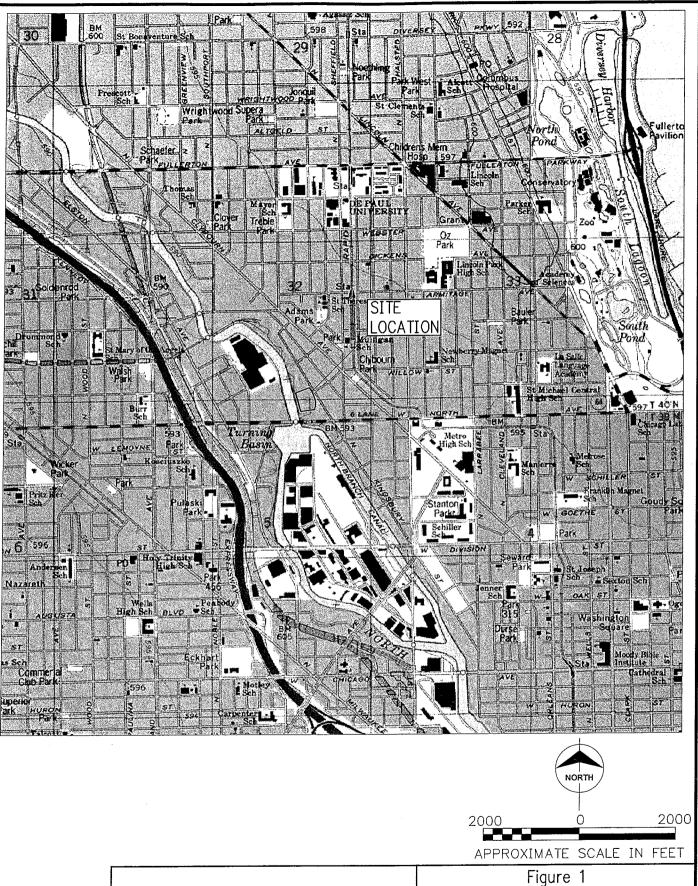
Amy Hanrahan

Environmental Engineer

1431 Opus Place Suite 400

Downers Grove, IL 60515-1164 Attachment

Tel: 630 724-3200 Fax: 630 724-3201 www.burnsmcd.com



SITE LOCATION MAP FORMER WILLOW STREET STATION 1640 NORTH KINGSBURY PORTION CHICAGO, ILLINOIS

EDR GEOCHECK 2003

GEOCHECK®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

WILLOW STREET STATION 1701 KINGSBURY STREET CHICAGO, IL 60614

TARGET PROPERTY COORDINATES

Latitude (North):

41.912899 - 41° 54' 46.4"

Longitude (West):

87.656303 - 87° 39' 22.7"

Universal Tranverse Mercator: Zone 16

UTM X (Meters):

445571.1

UTM Y (Meters):

4640100.5

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

USGS TOPOGRAPHIC MAP ASSOCIATED WITH THIS SITE

Target Property:

2441087-H6 CHICAGO LOOP, IL

Source: USGS 7.5 min quad index

GENERAL TOPOGRAPHIC GRADIENT AT TARGET PROPERTY

Target Property:

General SW

Source: General Topographic Gradient has been determined from the USGS 1 Degree Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

FEMA Flood

Target Property County

Electronic Data

COOK, IL.

YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:

1700740055B

Additional Panels in search area:

00000000000 1700740045B 1700740039B 1700740060B

NATIONAL WETLAND INVENTORY

NWI Electronic

NWI Quad at Target Property

Data Coverage

CHICAGO LOOP

YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Site-Specific Hydrogeological Data*:

Search Radius:

2.0 miles

Status:

Not found

AQUIFLOW®

Search Radius: 2.000 Miles.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

LOCATION FROM TP 1/2 - 1 Mile SSE 1/2 - 1 Mile SSW 1/2 - 1 Mile West 1/2 - 1 Mile West 1/2 - 1 Mile South 1/2 - 1 Mile North 1/2 - 1 Mile ENE 1 - 2 Miles NNW 1 - 2 Miles SSE 1 - 2 Miles SSE 1 - 2 Miles NNE 1 - 2 Miles NE 1 - 2 Miles SSE 1 - 2 Miles SSE 1 - 2 Miles SSE 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles NNE 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles NNE 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSW	GENERAL DIRECTION GROUNDWATER FLOW NE Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported E Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Inconclusive Not Reported
	FROM TP 1/2 - 1 Mile SSE 1/2 - 1 Mile SSW 1/2 - 1 Mile SSW 1/2 - 1 Mile West 1/2 - 1 Mile South 1/2 - 1 Mile North 1/2 - 1 Mile ENE 1 - 2 Miles SSE 1 - 2 Miles SSE 1 - 2 Miles SSE 1 - 2 Miles NE 1 - 2 Miles SSE 1 - 2 Miles SSE 1 - 2 Miles SSE 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSW 1 - 2 Miles SSE 1 - 2 Miles SE 1 - 2 Miles SE 1 - 2 Miles SE 1 - 2 Miles SE 1 - 2 Miles SE

For additional site information, refer to Physical Setting Source Map Findings.

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era:

Paleozoic

Category: Stratifed Sequence

System:

Silurian

Series: Code:

Middle Silurian (Niagoaran)

(decoded above as Era, System & Series) S2

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:

URBANLAND

Soil Surface Texture:

variable

Hydrologic Group:

Not reported

Soil Drainage Class:

Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min:

> 0 inches

Depth to Bedrock Max:

> 0 inches

			Soil Layer	Information			
Boundary			Classif	fication			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	60 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: silt loam

fine sandy loam

loam fine sand

Surficial Soil Types:

silt loam

fine sandy loam

loam fine sand

Shallow Soil Types:

sandy loam

Deeper Soil Types:

silt loam

GEOCHECK[®] - PHYSICAL SETTING SOURCE SUMMARY

loamy sand sand loam

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

COATION

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)

Federal USGS 1.000

Federal FRDS PWS Nearest PWS within 1 mile

State Database 1..000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AT	415446087393901	1/8 - 1/4 Mile West
A2	415446087393901	1/8 - 1/4 Mile West
D12	415455087394501	1/4 - 1/2 Mile WNW
D13	415455087394501	1/4 - 1/2 Mile WNW
G28	415412087391801	1/2 - 1 Mile South
G29	415412087391801	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

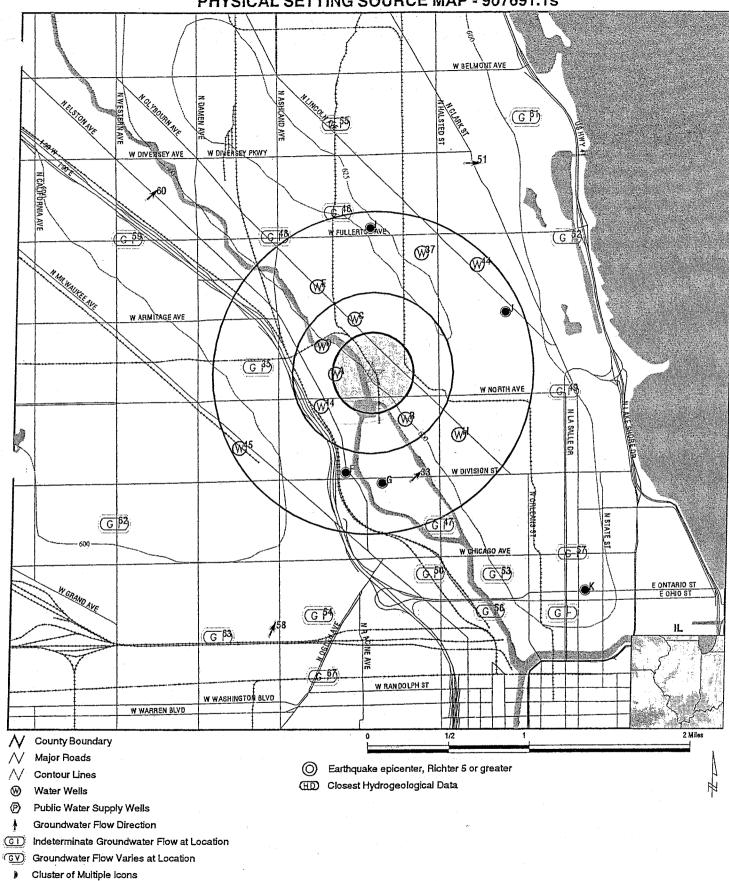
MAP ID	WELL ID	FROM TP
B3	GIL00020627	1/4 - 1/2 Mile SSE
B4	GII 00020628	1/4 - 1/2 Mîle SSE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
C5	P7519	1/4 - 1/2 Mile NNW
C6	P7518	1/4 - 1/2 Mile NNW
C7	P7520	1/4 - 1/2 Mile NNW
C8	P7521	1/4 - 1/2 Mile NNW
C9	P7517	1/4 - 1/2 Mile NNW
C10	P7522	1/4 - 1/2 Mile NNW
C11	P7523	1/4 - 1/2 Mile NNW
14	P7020	1/4 - 1/2 Mile WSW
B15	P7018	1/4 - 1/2 Mile SE
E16	GIL00021505	1/2 - 1 Mile NNW
F17	P7015	1/2 - 1 Mile SSW
F18	P7010	1/2 - 1 Mile SSW
F19	P7017	1/2 - 1 Mile SSW
F20	P7014	1/2 - 1 Mile SSW
F21	P7009	1/2 - 1 Mile SSW
F22	P7011	1/2 - 1 Mile SSW
F23	P7016	1/2 - 1 Mile SSW
F24	P7013	1/2 - 1 Mile SSW
F25	P7012	1/2 - 1 Mile SSW
E26	P7526	1/2 - 1 Mile NW
E27	P7525	1/2 - 1 Mile NW
H30	P7007	1/2 - 1 Mile SE
H31	P7008	1/2 - 1 Mile SE
E32	GIL00021506	1/2 - 1 Mile NNW
37	P7524	1/2 - 1 Mile NNE
J39	P7528	1/2 - 1 Mile ENE
J40	P7527	1/2 - 1 Mile ENE
142	GIL00027620	1/2 - 1 Mile North
143	GIL00027619	1/2 - 1 Mile North
44	P7529	1/2 - 1 Mile NE
45	P7021	1/2 - 1 Mile WSW

PHYSICAL SETTING SOURCE MAP - 907691.1s



Map ID Direction Distance EDR ID Number Database Elevation A1 West 415446087393901 **FED USGS** 1/8 - 1/4 Mile Lower . **BASIC WELL DATA** Single well, other than collector or Ranney type Site Type: Cook County: Not Reported Year Constructed: State: Illinios 593.00 ft. Altitude: Not Reported Topographic Setting: 1850.00 ft. Well Depth: Prim. Use of Site: Withdrawal of water Depth to Water Table: Not Reported Prim. Use of Water: **Bottling** Date Measured: Not Reported Α2 415446087393901 **FED USGS** West 1/8 - 1/4 Mile Lower **BASIC WELL DATA** Single well, other than collector or Ranney type Site Type: Cook County: Not Reported Year Constructed: Illinios 593.00 ft. State: Altitude: Not Reported Topographic Setting: 1850.00 ft. Well Depth: Withdrawal of water Prim. Use of Site: Not Reported Depth to Water Table: Prim. Use of Water: Bottling Not Reported Date Measured: IL WELLS GIL00020627 SSE 1/4 - 1/2 Mile Higher IL Geological Survey Info Source: 31 Group Number: 120310165100 API ID: 0 Water Well Boring: Well Type: 3235777 Y Coord: 3500633 X Coord: GIL00020628 IL WELLS SSE 1/4 - 1/2 Mile Higher IL Geological Survey Info Source: 31 Group Number: 120310165200 API ID: Water Weil Boring: n Well Type:

Y Coord:

C5 NNW 1/4 - 1/2 Mile Higher

X Coord:

3500633

IL WELLS

P7519

3235777

Well ID:

Permit:

034176

Second ID:

Not Reported

Info Source: Owner:

IL. Private Water Wells Survey

GUTMANN TANNERY CO

Date Drilled:

00/00/1900

Depth (in feet): County Code:

Not Reported 990 031 40N

Aquifer Type: County:

Bedrock COOK 14E

Township: Section:

32

Plot Location: Well Type:

Range:

Not Reported 1

Well Use:

IN

Record Type:

Chemical Analysis, Any other type of record

Driller:

Not Reported

C6 NNW 1/4 - 1/2 Mile Higher

IL WELLS

P7518

Well ID:

029502

Second ID:

Not Reported

Info Source:

IL Private Water Wells Survey BIRK BREWING CO/CORPER & NOCKI

Owner: Permit:

Not Reported

Date Drilled:

06/00/1899

Depth (in feet):

1565

Aquifer Type: County:

Bedrock COOK

County Code: Township:

031 40N

Range: Plot Location:

14E Not Reported

Section: Well Use: 32 IN

Well Type:

11

Record Type: Driller:

Any other type of record J P MILLER

C7 NNW 1/4 - 1/2 Mile Higher

IL WELLS

P7520

Well ID:

034182

Second ID:

Not Reported

Info Source: Owner:

IL. Private Water Wells Survey **JEFFERSON ICE CO PLANT #5**

Permit: Depth (in feet): Not Reported 1616

Date Drilled: Aquifer Type: 00/00/1895 Bedrock СООК

County Code: Township: Section:

031 40N

County: Range: Plot Location:

14E

Well Use:

32

Well Type:

Not Reported

Record Type:

Any other type of record

MILLER BROS

II

WNN 1/4 - 1/2 Mile Higher

Driller:

IL WELLS

Well ID:

034186

Second ID:

Not Reported

Info Source: Owner:

IL Private Water Wells Survey NORTHWEST BREWERY

Permit: Depth (in feet): Not Reported 1302

Date Drilled: Aquifer Type: 00/00/1897 Bedrock COOK

County Code: Township:

031 40N 32

County: Range: Plot Location:

14E Not Reported

Section: Well Use:

IN

Well Type:

Record Type:

Any other type of record

Driller:

J P MILLER

C9 NNW 1/4 - 1/2 Mile

Higher

029497

Second ID:

Well ID:

Info Source:

IL Private Water Wells Survey

Not Reported

Owner:

ATLANTIC BREWING CO/PAUL POHL

Permit:

Not Reported 1304

Date Drilled: Aquifer Type: 00/00/1800 Bedrock COOK

Depth (in feet): County Code: Township:

031 40N 32

IN

County: Range: Plot Location:

14E Not Reported

Well Use: Record Type:

Section:

Any other type of record

Driller:

J P MILLER

Well Type:

C10 NNW 1/4 - 1/2 Mile Higher

034187

IL WELLS

IL WELLS

P7522

P7517

Well ID:

Second ID:

Not Reported

Info Source: Owner:

IL Private Water Wells Survey PETER HAND BREWERY CO

Permit: Depth (in feet):

Not Reported 1972

Date Drilled: Aquifer Type: County:

00/00/1905 Bedrock COOK

County Code: Township:

031 40N

Range: Plot Location: 14E Not Reported

Section: Well Use: Record Type: 32

Well Type: Chemical Analysis, Any other type of record

Driller:

J P MILLER

11

NNW 1/4 - 1/2 Mile Higher

IL WELLS

Well ID:

Owner:

034190

Second ID:

Not Reported

Info Source:

IL Private Water Wells Survey

SPIELMAN BROS VINEGAR WORKS

Date Drilled:

05/00/1899

Permit: Depth (in feet):

1590 031

Not Reported

Aquifer Type: County:

Bedrock COOK

County Code: Township:

40N 32

Range: Plot Location: 14E

Section: Well Use:

Well Type:

Not Reported

Geology, Chemical Analysis, Any other type of record

Record Type:

Driller:

J P MILLER

D12 WNW 1/4 - 1/2 Mile Higher

FED USGS

415455087394501

BASIC WELL DATA

Site Type:

Year Constructed:

1905

Single well, other than collector or Ranney type County:

Altitude:

590.00 ft.

State:

Cook Illinios

Well Depth:

1973.00 ft.

Topographic Setting:

Not Reported

Depth to Water Table:

Not Reported

Prim. Use of Site:

Withdrawal of water

Prim. Use of Water: Date Measured: Not Reported

Bottling

D13 WNW 1/4 - 1/2 Mile Higher

FED USGS

415455087394501

BASIC WELL DATA

Site Type:

Single well, other than collector or Ranney type

Year Constructed:

1905 590.00 ft. County: State:

Cook Illinios

Altitude: Well Depth: Depth to Water Table:

1973.00 ft. Not Reported

Topographic Setting: Prim. Use of Site:

Not Reported

Date Measured:

Not Reported

Prim. Use of Water:

Withdrawal of water

Bottling

WSW 1/4 - 1/2 Mile Lower

IL WELLS

P7020

Well ID:

033819

Second ID:

County:

Not Reported

Info Source: Owner:

Permit:

IL Private Water Wells Survey

Not Reported

CHICAGO BREWERY CO

Date Drilled: Aguifer Type:

00/00/1914 **Bedrock** COOK 14E

5H

1

Depth (in feet): County Code: Township: Section:

1875 031 39N

05

Range: Plot Location: Well Type:

Well Use: Record Type: IN Construction Report, Geology, Chemical Analysis

Driller:

GEIGER

Map ID Direction Distance Database EDR ID Number Elevation B15 P7018 IL WELLS 1/4 - 1/2 Mile Higher Second ID: Not Reported Well ID: 033853 Info Source: IL Private Water Wells Survey PRIMA PRODUCTS/INDEPENDENT BRE Owner: 00/00/1914 Date Drilled: Not Reported Permit: Bedrock 2164 Aquifer Type: Depth (in feet): COOK County: County Code: 031 Range: 14E 39N Township: 1G Plot Location: Section: 05 Well Type: 11 Well Use: Geology, Chemical Analysis, Any other type of record Record Type: J P MILLER Driller: E16 GIL00021505 IL WELLS NNW 1/2 - 1 Mile Higher IL Geological Survey Info Source: 31 Group Number: API ID: 120310337800 Boring: Water Well Well Type: 3239962 Y Coord: 3498145 X Coord: F17 IL WELLS P7015 SSW 1/2 - 1 Mile Higher Second ID: Not Reported Well ID: 033836 IL Private Water Wells Survey Info Source: **EARNEST BROS BREWERY** Owner: Date Drilled: 00/00/1889 Permit: Not Reported Bedrock Aquifer Type: 1655 Depth (in feet): COOK 031 County: County Code: 14E Range: Township: 39N Not Reported 05 Plot Location: Section: Well Type: Well Use: Any other type of record Record Type: J P MILLER Driller:

F18 SSW 1/2 - 1 Mile Higher

IL WELLS

Well ID:

024216

Second ID:

Not Reported

Info Source:

IL Private Water Wells Survey

CHICAGO BREWING CO(OR 1875' DE

Owner: Permit:

Not Reported

Date Drilled: Aquifer Type: 00/00/1934

Depth (in feet):

1627

County:

Bedrock

County Code: Township:

031

Range:

COOK 14E

Section:

39N 05

Plot Location:

Not Reported

Well Use:

!N

Well Type:

ASSUMED DRILLED

Record Type:

Construction Report, Geology, Indicates comment in owner's field something

unusual

Driller:

J P MILLER

F19 SSW 1/2 - 1 Mile

IL WELLS

P7017

Higher

Well ID: Owner:

Second ID:

Not Reported

Info Source:

IL Private Water Wells Survey

STANDARD BRANDS #1

Date Drilled:

00/00/1922

Permit: Depth (in feet):

1966 031

Aquifer Type: County:

COOK 14E

County Code: Township:

39N 05

Range: Plot Location:

Not Reported

Well Use: Record Type:

Section:

Driller:

IN Any other type of record LAYNE-BOWLER

Not Reported

Well Type:

F20

SSW 1/2 - 1 Mile Higher

IL WELLS

P7014

Well ID:

033809

Second ID:

Info Source: Owner:

IL Private Water Wells Survey

Not Reported

Permit:

HERMAN & CO/AMERICAN MALTING C Not Reported

Date Drilled:

02/02/1899

Depth (in feet): County Code:

1302

Aquifer Type:

Bedrock

Township: Section:

031 39N County: Range: Plot Location: COOK 14E Not Reported

Well Use:

05

Well Type: Geology, Chemical Analysis, Any other type of record 11

Record Type: Driller:

J P MILLER

1/2 - 1 Mile Higher

IL WELLS

Well ID:

023909

Second ID:

Not Reported

Info Source:

IL Private Water Wells Survey

Owner: Permit:

BUSH & GERTZ PIANO CO/PATENT S Not Reported

Date Drilled:

00/00/1910

Depth (in feet):

412 031

Aquifer Type:

Not Reported

County Code: Township:

39N

County: Range: COOK 14E

Section:

05

Plot Location:

Not Reported

Well Use:

IN

Well Type:

ASSUMED DRILLED

Record Type:

Driller:

Any other type of record

Not Reported

SSW 1/2 - 1 Mile Higher

IL WELLS

P7011

Well ID: Info Source: 029542

Second ID:

Not Reported

Owner:

IL Private Water Wells Survey CHICAGO BREWING CO (OR 1875' D

00/00/1934

Permit: Depth (in feet): Not Reported 1627

Date Drilled: Aquifer Type:

Bedrock COOK

County Code:

031 39N County: Range:

14E

Township: Section: Well Use:

05 IN

Plot Location: Well Type:

Not Reported

Construction Report, Geology, Indicates comment in owner's field something Record Type:

unusual

Driller:

J P MILLER

F23 SSW 1/2 - 1 Mile Higher

Well ID:

033892

Second ID:

Not Reported

Info Source: Owner:

IL Private Water Wells Survey

WEST SIDE BREWERY

Permit: Depth (in feet): County Code:

Not Reported 2100 031

Date Drilled: Aquifer Type: County:

00/00/1914 Bedrock COOK 14E

Township: Section:

Driller:

39N 05 IN

Range: Plot Location:

Not Reported 1

Well Use: Record Type:

Chemical Analysis Not Reported

Well Type:

F24 SSW 1/2 - 1 Mile Higher

IL WELLS

IL WELLS

P7013

Well ID: Info Source: Owner: Permit:

033492 IL Private Water Wells Survey STANDARD BRANDS

Second ID:

Not Reported

Depth (in feet): County Code: Township:

Not Reported 1962 031 39N 05 IN

Date Drilled: Aquifer Type: County: Range:

Plot Location:

Well Type:

00/00/1925 Bedrock COOK 14E Not Reported

ĺ

Well Use:

Record Type:

Geology, Any other type of record

Driller:

Section:

LAYNE-BOWLER

IL WELLS

P7012

1/2 - 1 Mile Higher

Well ID:

033482

Second ID:

Not Reported

Info Source: Owner:

IL Private Water Wells Survey STANDARD BRANDS/FLEISCHMAN YEA Not Reported

Date Drilled:

County:

00/00/1918 Bedrock COOK

Permit: Depth (in feet): County Code: Township: Section:

031 39N 05

1966

Range: Plot Location: Well Type:

Aquifer Type:

14E Not Reported

Well Use:

IN

Geology, Any other type of record

I

Record Type: Driller:

GEIGER

NW 1/2 - 1 Mile

IL WELLS

P7526

Higher

Well ID: Info Source: 034163 IL Private Water Wells Survey

Second ID:

Not Reported

Owner: Permit:

BIRK BREWING CO Not Reported

Date Drilled: Aquifer Type:

County:

00/00/1893 Bedrock COOK

Depth (in feet): County Code: Township: Section:

Range: Plot Location: Well Type:

14E 6F 11

Well Use: Record Type: Driller:

IN Geology, Any other type of record

J P MILLER

E27 NW 1/2 - 1 Mile Higher

IL WELLS

Well ID:

034162

Second ID:

Not Reported

Info Source:

IL Private Water Wells Survey

Owner:

BIRK BREWING CO

Permit:

Not Reported 1590

Date Drilled: Aquifer Type: 09/00/1943

Depth (in feet): County Code:

031

County:

Bedrock COOK

Township:

40N

Range: Plot Location:

14E 6F

Section: Well Use: 32 IN

Well Type:

1

Record Type:

Construction Report, Geology, Chemical Analysis, Any other type of record

Driller:

GEIGER

G28 South 1/2 - 1 Mile Higher

FED USGS

415412087391801

BASIC WELL DATA

Site Type:

Single well, other than collector or Ranney type Not Reported

County:

Cook

Year Constructed: Altitude:

594.00 ft.

State:

Illinios

Well Depth:

2164.00 ft.

Topographic Setting: Prim. Use of Site:

Not Reported Withdrawal of water

Depth to Water Table: Date Measured:

Not Reported Not Reported

Prim. Use of Water:

Industrial

G29 South

1/2 - 1 Mile Higher

FED USGS

IL WELLS

415412087391801

BASIC WELL DATA

Site Type:

Year Constructed:

Not Reported

Single well, other than collector or Ranney type County:

Altitude:

Cook

594.00 ft.

State:

Illinios

Well Depth:

2164.00 ft.

Topographic Setting:

Not Reported

Depth to Water Table: Date Measured:

Not Reported

Prim. Use of Site:

Withdrawal of water

Prim. Use of Water:

Industrial

H30

SE 1/2 - 1 Mile

Not Reported

P7007

Higher

Well ID:

Permit:

033829

Second ID:

Not Reported

Info Source:

IL Private Water Wells Survey

Owner:

CRYSTAL ICE CO.

Date Drilled:

07/00/1897

Depth (in feet): County Code:

Not Reported 1615

Aquifer Type: County: Range:

Bedrock COOK 14E

Township: Section:

031 39N 04

Plot Location: Well Type:

7G II

Well Use: Record Type:

Geology, Any other type of record

Driller:

J P MILLER

Map ID								
Direction								
Distance Elevation						Database	EDF	ID Number
H31	·							
SE						IL WELLS	P7008	
1/2 - 1 Mile Higher								
•		000000		Second ID:	Not Reported			
Well ID: Info Source	a•	033882	er Wells Survey	Second ID.	Not neported			
Owner:			ING CO/OLD EX	CELSIO				
Permit:		Not Reported		Date Drilled:	05/00/1897	•		
Depth (in fe	•	1240		Aquifer Type:	Bedrock COOK			
County Cod Township:	de:	031 39N		County: Range:	14E			
Section:		04		Plot Location:	7G			
Well Use:		IN		Well Type:	11			
Record Typ	e:		ical Analysis,Any	other type of record				
Driller:		MILLER					•	
						·		
•		•						
E32 NNW						IL WELLS	GIL.000	21506
1/2 - 1 Mile				*		•		
Higher								
Info Source	:	IL Geological Si	urvey	Group Number:	31			
API ID: Well Type:		120310337900 Water Well		Boring:	0			
X Coord:		3497804		Y Coord:	3240278			
33	Site ID:		S10005238	4		AQUIFLOW	24816	
SSE 1/2 - 1 Mile	Groundwat		NE 5			AGOIFLOW	24010	
Lower	Deep Wate Average W	ater Depth:	Not Reporte	d ·				
	Shallow Wa		2					
	Current De		5	ı				
		erage Depth: allow Depth:	Not Reporte 2	.				
	Date:	anon Depun.	03/98					
		· · · · · · · · · · · · · · · · · · ·						
F34	Site ID:		S102943665			- 1		
SSW	Groundwate	er Flow:	Not Reporte		"	AQUIFLOW	62415	
1/2 - 1 Mile Higher	Deep Wate		17.25					
g	Average Wa		Not Reported	d				
	Shallow Wa Current Dec	•	6.62 Not Reported	i .				
		rage Depth:	4	*		4		
	Current Sha	illow Depth:	Not Reported	i				
	Date:		02/05/1996				<u></u>	
								
35	Site ID:		1000402536			AQUIFLOW	62994	
West 1/2 - 1 Mile	Groundwate		Not Reported			Adoli Loti	02334	
Higher	Deep Water Average Wa	•	Not Reported					
	Shallow Wa	•	Not Reported	· 	:			
	Current Dee		Not Reported					
	Current Ave Current Sha		6.77 Not Reported	I				
	Date:	now pehin.	12/09/1993					

Distance Elevation					Database	EDR II	O Numbe
G36	Site ID:	S10053025	52				
South	Groundwater Flow:	Not Report	ted		AQUIFLOW	62373	
/2 - 1 Mile	Deep Water Depth:	548					
ligher	Average Water Depth:	Not Report	ted			-	
	Shallow Water Depth:	2.31					
	Current Deep Depth:	Not Report	ted				
	Current Average Depth:	Not Report	ed				
	Current Shallow Depth:	Not Report	ed				
	Date:	10/18/1996		,			
7 INE /2 - 1 Mile ligher					IL WELLS	P7524	
Well ID:	034173		Second ID:	Not Reported			
Info Source:	IL Private Water	Wells Survey					
Owner:	F P SMITH WIRE	E & IRON WOR		0010014007			
Permit:	Not Reported		Date Drilled:	00/00/1897		-	
Depth (in feet	•		Aquifer Type:	Bedrock			
County Code:	: 03,1		County:	COOK			
Township:	40N		Range:	14E			
Section:	32		Plot Location:	1H			
Well Use:	IN .						
			Well Type:	II			
Record Type:	Geology,Chemic	al Analysis,Any	Well Type: other type of record				
		al Analysis,Any					
Record Type: Driller:	Geology,Chemic GEIGER		other type of record		-	· .	
Record Type: Driller:	Geology,Chemica GEIGER	100046308	other type of record		AQUIFLOW	61949	
Record Type: Driller: 88 lorth /2 - 1 Mile	Geology;Chemics GEIGER Site ID: Groundwater Flow:	100046308 Not Reporte	other type of record 5		AQUIFLOW	61949	
Record Type: Driller: 88 orth /2 - 1 Mile	Geology, Chemics GEIGER Site ID: Groundwater Flow: Deep Water Depth:	100046308 Not Reporte Not Reporte	other type of record 5		AQUIFLOW	61949	
Record Type: Driller: 88 orth /2 - 1 Mile	Geology;Chemics GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth:	100046308 Not Reporte Not Reporte 5.5	other type of record 5 ed ed		AQUIFLOW	61949	
Record Type: Driller: 88 lorth /2 - 1 Mile	Geology, Chemics GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth:	100046308 Not Reporte Not Reporte	other type of record 5 ed ed		AQUIFLOW	61949	-
Record Type: Driller: 38 Jorth /2 - 1 Mile ligher	Geology, Chemics GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth:	100046308 Not Reports Not Reports 5.5 Not Reports 7	other type of record 5 ed ed		AQUIFLOW	61949	
Record Type: Driller: 88 orth 1/2 - 1 Mile igher	Geology, Chemics GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth:	100046308 Not Reporte Not Reporte 5.5 Not Reporte	other type of record 5 ed ed		AQUIFLOW	61949	
Record Type: Driller: 88 orth 12 - 1 Mile igher	Geology, Chemica GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth:	100046308 Not Reporte Not Reporte 5.5 Not Reporte 7 Not Reporte	other type of record 5 ed ed		AQUIFLOW	61949	
Record Type: Driller: 38 Jorth /2 - 1 Mile ligher	Geology, Chemica GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth:	100046308 Not Reports Not Reports 5.5 Not Reports 7 Not Reports 6	other type of record 5 ed ed				
Record Type: Driller: 38 lorth /2 - 1 Mile ligher 39	Geology, Chemica GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth:	100046308 Not Reports Not Reports 5.5 Not Reports 7 Not Reports 6	other type of record 5 ed ed		AQUIFLOW	61949 P7528	
Record Type: Driller: 88 orth (2 - 1 Mile igher 89 NE 2 - 1 Mile	Geology, Chemica GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth:	100046308 Not Reports Not Reports 5.5 Not Reports 7 Not Reports 6	other type of record 5 ed ed				
Record Type: Driller: 8 orth 2 - 1 Mile igher 89 NE 2 - 1 Mile	Geology, Chemica GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth:	100046308 Not Reports Not Reports 5.5 Not Reports 7 Not Reports 6	other type of record 5 ed ed				
Record Type: Driller: 88 orth (2 - 1 Mile igher 89 NE 2 - 1 Mile igher	Geology, Chemica GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date:	100046308 Not Reporte 5.5 Not Reporte 7 Not Reporte 6 08/05/1997	other type of record 5 ed ed ed				
Record Type: Driller: 88 orth (2 - 1 Mile igher 89 NE 2 - 1 Mile igher Well ID:	Geology, Chemica GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date:	100046308 Not Reporte 5.5 Not Reporte 7 Not Reporte 6 08/05/1997	other type of record 5 ed ed ed ed ed	Not Reported			
Record Type: Driller: 88 orth (2 - 1 Mile igher 89 NE 2 - 1 Mile igher Well ID: Info Source:	Geology, Chemica GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date: 034177 IL Private Water V	100046308 Not Reporte 5.5 Not Reporte 7 Not Reporte 6 08/05/1997	other type of record 5 ed ed ed	Not Reported 00/00/1895			
Record Type: Driller: 8 orth 2 - 1 Mile igher 8 VE 2 - 1 Mile gher Well ID: Info Source: Owner:	Geology, Chemica GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date: 034177 IL Private Water V HETZEL PKG CO	100046308 Not Reporte 5.5 Not Reporte 7 Not Reporte 6 08/05/1997	other type of record 5 ed ed ed ed Second ID: Date Drilled: Aquifer Type:	Not Reported 00/00/1895 Not Reported			
Record Type: Driller: 8 orth 2 - 1 Mile igher 8 VEI 2 - 1 Mile gher Well ID: Info Source: Owner: Permit: Depth (in feet)	Geology, Chemica GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date: 034177 IL Private Water V HETZEL PKG CO	100046308 Not Reporte 5.5 Not Reporte 7 Not Reporte 6 08/05/1997	other type of record 5 ed ed ed ed ed Date Drilled:	Not Reported 00/00/1895 Not Reported COOK			
Record Type: Driller: 88 orth (2 - 1 Mile igher 99 NE 2 - 1 Mile igher Well ID: Info Source: Owner: Permit:	Geology, Chemica GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date: 034177 IL Private Water V HETZEL PKG CO Not Reported : 160	100046308 Not Reporte 5.5 Not Reporte 7 Not Reporte 6 08/05/1997	other type of record 5 ed ed ed ed Second ID: Date Drilled: Aquifer Type:	Not Reported 00/00/1895 Not Reported COOK 14E			
Record Type: Driller: 88 orth (2 - 1 Mile igher 89 NE 2 - 1 Mile igher Well ID: Info Source: Owner: Permit: Depth (in feet) County Code:	Geology, Chemica GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date: 034177 IL Private Water V HETZEL PKG CO Not Reported : 160 031	100046308 Not Reporte 5.5 Not Reporte 7 Not Reporte 6 08/05/1997	other type of record 5 ed ed ed ed ed Date Drilled: Aquifer Type: County: Range: Plot Location:	Not Reported 00/00/1895 Not Reported COOK 14E Not Reported			
Record Type: Driller: 88 orth /2 - 1 Mile igher 89 NE 2 - 1 Mile igher Well ID: Info Source: Owner: Permit: Depth (in feet) County Code: Township:	Geology, Chemica GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date: 034177 IL Private Water V HETZEL PKG CO Not Reported 160 031 40N	100046308 Not Reporte 5.5 Not Reporte 7 Not Reporte 6 08/05/1997	other type of record 5 ed ed ed ed Second ID: Date Drilled: Aquifer Type: County: Range:	Not Reported 00/00/1895 Not Reported COOK 14E			
Record Type: Driller: 88 orth /2 - 1 Mile ligher 39 NE 2 - 1 Mile igher Well ID: Info Source: Owner: Permit: Depth (in feet) County Code: Township: Section:	Geology, Chemica GEIGER Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Current Deep Depth: Current Average Depth: Current Average Depth: Current Shallow Depth: Date: 034177 IL Private Water V HETZEL PKG CO Not Reported : 160 031 40N 33	100046308 Not Reporte Not Reporte 7 Not Reporte 6 08/05/1997	other type of record 5 ed ed ed ed ed Date Drilled: Aquifer Type: County: Range: Plot Location:	Not Reported 00/00/1895 Not Reported COOK 14E Not Reported			

Map ID Direction Distance EDR ID Number Database Elevation J40 IL WELLS P7527 ENE 1/2 - 1 Mile Higher Not Reported Second ID: Well ID: 023954 Info Source: IL. Private Water Wells Survey BARTHOLOMAE & LEICHT BREWING C Owner: Date Drilled: 00/00/1889 Permit: Not Reported Aquifer Type: Bedrock 1630 Depth (in feet): County: COOK County Code: 031 Range: 14E 40N Township: Not Reported Plot Location: Section: 33 ASSUMED DRILLED Well Type: Well Use: Any other type of record Record Type: J P MILLER Driller: 1000612992 Site ID: **AQUIFLOW** 27103 Not Reported Groundwater Flow: 1/2 - 1 Mile Deep Water Depth: Not Reported Higher Average Water Depth: Shallow Water Depth: Not Reported Current Deep Depth: Not Reported Current Average Depth: Not Reported Current Shallow Depth: 08/06/1997 Date: 142 North 1/2 - 1 Mile Higher IL WELLS GIL00027620 Info Source: IL Geological Survey 31 120313145300 Group Number: API ID: Well Type: Water Well Boring: 0 3241992 Y Coord: X Coord: 3499368 143 IL WELLS GIL00027619 North 1/2 - 1 Mile Higher Info Source: IL Geological Survey 31 120313145200 Group Number: API ID: Water Well Boring: 0 Well Type: 3241992 X Coord: 3499368 Y Coord:

1/2 - 1 Mile Higher

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IL WELLS

Second ID: Not Reported Well ID: 034189 IL Private Water Wells Survey Info Source: U S BREWING CO/SCHMIDT BREWERY Owner: Date Drilled: 00/00/1901 Not Reported Permit: Bedrock Aguifer Type: 1593 Depth (in feet): COOK County: County Code: 031 14E Range: Township: 40N Plot Location: 5G Section: 33 II Well Type: IN Well Use: Geology, Chemical Analysis, Indicates comment in owner's field something Record Type: unusual, Any other type of record Driller: J P MILLER 45 WSW 1/2 - 1 Mile P7021 IL WELLS Higher Not Reported Second ID: 033886 Well ID: IL Private Water Wells Survey Info Source: SULZBERGER & SONS (DUPLICATE) Owner: Date Drilled: 00/00/1914 Not Reported Permit: Aquifer Type: Bedrock Depth (in feet): 1620 COOK 031 County: County Code: 14E 39N Range: Township: 2F Plot Location: Section: 06 Well Type: IN Well Use: Chemical Analysis, Inventory, Indicates comment in owner's field something Record Type: unusual Not Reported Driller: S101823267 Site ID: 46 NNW 62017 AQUIFLOW Not Reported Groundwater Flow: 1 - 2 Miles Not Reported Deep Water Depth: Higher Average Water Depth: Not Reported Shallow Water Depth: Not Reported Current Deep Depth: Current Average Depth: Current Shallow Depth: Not Reported 11/20/1991 Date: \$100530438 Site ID: 47 SSE 61916 **AQUIFLOW** Not Reported Groundwater Flow: 1 - 2 Miles Deep Water Depth: 10.70 Lower Not Reported Average Water Depth: 6.30 Shallow Water Depth: 7.21 Current Deep Depth: Not Reported Current Average Depth: Current Shallow Depth: 4.40 05/1997 Date: S100530159 Site ID: **AQUIFLOW** 62917 Not Reported Groundwater Flow: 1 - 2 Miles Not Reported Deep Water Depth: Higher Not Reported Average Water Depth: Shallow Water Depth: Not Reported Current Deep Depth: 7.14 Not Reported Current Average Depth: Current Shallow Depth: 4.32

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Date:

Map ID Direction Distance							
Elevation				·	Database	EDR	ID Number
49 East 1 - 2 Miles Higher	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth:	S100530704 Not Reported 12 Not Reported 10			AQUIFLOW	62124	
	Current Deep Depth: Current Average Depth: Current Shallow Depth: Date:	9.74 Not Reported 9.23 08/22/1998					
50 SSE 1 - 2 Miles Higher	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth:	S100530738 Not Reported Not Reported 6			AQUIFLOW	56368	
·	Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date:	Not Reported Not Reported Not Reported Not Reported 03/13/1998					
51 NNE 1 - 2 Miles Higher	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date:	\$100530354 E 8.5 Not Reported 4.5 8 Not Reported 7 1/24/92			AQUIFLOW	25030	
52 NE 1 - 2 Miles Lower	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date:	S100054974 Not Reported 14 Not Reported 10 12 Not Reported 7 07/1995	, f		AQUIFLOW	56519	
53 SSE 1 - 2 Miles Higher	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date:	S102944042 Not Reported Not Reported 13 Not Reported Not Reported Not Reported Not Reported 01/06/1995			AQUIFLOW	56438	

Map ID									
Direction Distance Elevation							Database	EDR	ID Number
54 SSW 1 - 2 Miles	Site ID: Groundwater Flow: Deep Water Depth:	S102943634 Not Reported Not Reported					AQUIFLOW	27329	
Higher	Average Water Depth: Shallow Water Depth:	3 Not Reported							
	Current Deep Depth: Current Average Depth:	Not Reported 3							
	Current Shallow Depth:	Not Reported							
	Date:	10/20/1993					- 		
55	Shallow Water Depth:	75						40040	
North	Groundwater Flow:	Not Reported					AQUIFLOW	10648	
1 - 2 Miles Higher	Deep Water Depth: Date:	77 5/24/93							
56	Site ID:	S102943850							
SSE	Groundwater Flow:	Not Reported					AQUIFLOW	61894	
1 - 2 Miles Lower	Deep Water Depth:	Not Reported						•	
	Average Water Depth: Shallow Water Depth:	Not Reported Not Reported							
	Current Deep Depth:	10.26							
	Current Average Depth:	Not Reported							. *
	Current Shallow Depth:	5.20		•					
	Date:	01/20/1999				· · · · ·	<u></u> -	· · · · · · · · · · · · · · · · · · ·	
57	Site ID:	S100054979					AQUIFLOW	56591	
SE 1 - 2 Miles	Groundwater Flow: Deep Water Depth:	Not Reported Not Reported							
Higher	Average Water Depth:	Not Reported							
	Shallow Water Depth:	Not Reported		-					
	Current Deep Depth:	Not Reported					***		
	Current Average Depth: Current Shallow Depth:	Not Reported 18							
	Date:	02/10/1999		· · · · · · · · · · · · · · · · · · ·					**
58	Site ID:	S102943955					· court out	05040	
SSW 1 - 2 Miles	Groundwater Flow:	NNE					AQUIFLOW	25019	
Higher	Deep Water Depth:	Not Reported Not Reported							
	Average Water Depth: Shallow Water Depth:	Not Reported							
	Current Deep Depth:	Not Reported					4		
	Current Average Depth:	Not Reported	-						
	Current Shallow Depth:	Not Reported 3/29/93							1
	Date:	3/29/33							
59 WNW	Site ID:	S102943668			:		AQUIFLOW	61932	
1 - 2 Miles	Groundwater Flow: Deep Water Depth:	Not Reported 15.4							
Higher	Average Water Depth:	Not Reported							
	Shallow Water Depth:	7.7							
	Current Deep Depth:	15.4							
	Current Average Depth: Current Shallow Depth:	Not Reported 7.7						**	
	Date:	03/29/1994							

Map ID					
Direction Distance Elevation	· · · · · · · · · · · · · · · · · · ·			Database	EDR ID Numbe
60 NW 1 - 2 Miles Lower	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth:	1000211694 NE 7 Not Reported 5 5.81 Not Reported 2.30		AQUIFLOW	24909
	Date:	11/29/1993			
i1 INE - 2 Miles ligher	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth:	S102944091 Not Reported Not Reported Not Reported		AQUIFLOW	62183
	Shallow Water Depth: Current Deep Depth: Current Average Depth; Current Shallow Depth: Date:	12 11 Not Reported 10 10/30/1997			
1 - 2 Miles Higher	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth:	S100530134 Not Reported Not Reported Not Reported		AQUIFLOW	62616
	Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date:	Not Reported 7.67 Not Reported 3.63 06/30/1998			· · · · · · · · · · · · · · · · · · ·
SW - 2 Miles gher	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth:	S102943733 Inconclusive 12.31 Not Reported 3.59	<i>y</i>	AQUIFLOW	27203
	Current Deep Depth: Current Average Depth: Current Shallow Depth: Date:	12.31 Not Reported 3.59 11/05/1992			
4 2 Miles gher	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth:	S100530792 Not Reported 5.62 Not Reported 4.29 6 Not Reported		AQUIFLOW	27090
	Current Shallow Depth: Date:	4 05/1992			

Map ID					
Direction		· ·	**		
Distance Elevation				Database	EDR ID Numbe
			·		
K65	Site ID:	S102944571		AQUIFLOW	56315
SE	Groundwater Flow:	NE	_	AGON LON	30013
1 - 2 Miles Higher	Deep Water Depth:	Not Reported			
ingile:	Average Water Depth:	Not Reported			
	Shallow Water Depth:	Not Reported			•
	Current Deep Depth:	Not Reported			
	Current Average Depth:	Not Reported			
	Current Shallow Depth:	Not Reported	•		
	Date:	06/04/1992			
_66	Site ID:	S100052304		AQUIFLOW	24808
SE I - 2 Miles	Groundwater Flow:	Not Reported	*		
ligher	Deep Water Depth:	7.5			
	Average Water Depth:	Not Reported			
	Shallow Water Depth:	7			
	Current Deep Depth:	4.5			
	Current Average Depth:	Not Reported			
	Current Shallow Depth:	3			
	Date:	06/30/97			man .
	Site ID:	S101823471			
7 South	Groundwater Flow:	Not Reported		AQUIFLOW	56409
- 2 Miles	Deep Water Depth:	Not Reported			
ligher	Average Water Depth:	Not Reported			
	Shallow Water Depth:	Not Reported			•
	Current Deep Depth:	1	**		
	Current Average Depth:	Not Reported			
	Current Shallow Depth:	1.			
	Date:	02/05/1993			
68	Site ID:	1000612630	-	AQUIFLOW	62390
E - 2 Miles	Groundwater Flow:	Not Reported		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
igher	Deep Water Depth:	9			
•	Average Water Depth:	Not Reported			
	Shallow Water Depth:	8			
	Current Deep Depth:	9 Stat Demonstrat			
	Current Average Depth:	Not Reported			
	Current Shallow Depth:	8			
	Date:	04/24/1992			
	Site ID:	1000614843			
69 E	Groundwater Flow:	Not Reported		AQUIFLOW	61915
- 2 Miles		14			
igher	Deep Water Depth: Average Water Depth:	Not Reported			
	Shallow Water Depth:	10			
		14			
	Current Deep Depth: Current Average Depth:	Not Reported	-		
	Current Average Depth:	10			
		07/31/1997			
	Date:	0113111331			

AREA RADON INFORMATION

Federal EPA Radon Zone for COOK County: 2

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L

Federal Area Radon Info	rmation for Zip Code:	60614		-
Number of sites tested: 1				
Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.300 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOWR Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Amdt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the national Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-4099

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-4099

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: In November 1971 the United States Geological Survey (USGS) implemented a national water resource information tracking system. This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on more than 900,000 wells, springs, and other sources of groundwater.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

County Well Data in Illinois: Cook and DuPage Counties

Source: Illinois State Geological Survey

Telephone: 217-244-2387

Illinois Private Well Database and PICS (Public, Industrial, Commercial Survey)

Source: Illinois State Water Survey

Telephone: 217-333-9043

Illinois State Geological Survey Water Wells

Source: Illinois State Geological Survey

Telephone: 217-333-5102

Point data set that shows locations, well type, and well ID for wells in Illinois. Data comes from driller's logs.

RADON

Area Radon Information

Source: USGS

Telephone: 303-202-4210

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 202-564-9370

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

OTHER

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

APPENDIX E
CITY OF CHICAGO GROUNDWATER ORDINANCE
THE FORMER WILLOW STREET STATION
MANUFACTURED GAS PLANT SITE,
1640 NORTH KINGSBURY PORTION

CHICAGO GROUNDWATER ORDINANCE

In May 1997, the Chicago City Council passed a groundwater ordinance, set forth below, prohibiting the installation of new potable water supply wells. The purpose is to limit the potential for persons to be exposed to contaminants by ingesting groundwater. Since new potable wells are prohibited, groundwater contamination is not a potential source of exposure for the vast majority of sites in the city. Limiting the potential exposure pathways to those posed by ingesting or inhaling soil makes cleanups more practical and cost effective. Site owners enrolled in the Illinois Site Remediation Program still must test and report groundwater impacts from their site, however.

The City of Chicago and the Illinois Environmental Protection Agency have a memorandum of understanding which acknowledges the City's groundwater ordinance as an acceptable "institutional control" under the state's TACO guidelines.

* * * *

Municipal Code of Chicago, Illinois Chapter 11-8 WATER SUPPLY AND DISTRIBUTION SYSTEMS*

* Editor's note: Coun. J. 3-28-01, p. 55444, § 1, repealed Ch. 11-8, in its entirety, which pertained to water supply and distribution systems. Subsequently, Amend Coun. J. 11-28-01, p. 72895, § 1 added provisions designated as § 11-8-390. Former Ch. 11-8 (title) has been restored at the discretion of the editor to accommodate inclusion of provisions designated as 11-8-390. See the Code Comparative Table.

For purposes of this section, "potable water" is any water used for human consumption, including but not limited to water used for drinking, bathing, washing dishes, preparing foods and watering gardens in which produce intended for human consumption is grown. No groundwater well, cistern or other groundwater collection device installed after May 14, 1997, may be used to supply any potable water supply system, except at points of withdrawal by the City of Chicago or by a unit of local government pursuant to intergovernmental agreement with the City of Chicago.

(Added Coun. J. 11-28-01, p. 72895, § 1)

¹¹⁻⁸⁻³⁹⁰ Potable water wells.

APPENDIX F
SOIL COMPONENT EVALUATION
(SUPPORTING INFORMATION AND CALCULATIONS)
THE FORMER WILLOW STREET STATION
MANUFACTURED GAS PLANT SITE,
1640 NORTH KINGSBURY PORTION

Table 1 Summary of R26 Transport Simulation - Soil Component of the Groundwater Pathway to Chicago River

Soil Sample	Constituent	Distance to Downgradient River Bank (ft)	Constituent Concentration in Soil (mg/kg)	Leaching Factor (kg/L)	Groundwater Concentration at Source (mg/L)	Groundwater Concentration at the River (mg/L)	Class II Groundwater Standard* (mg/L)	Distance to Meet Class II Groundwater Standard (ft)
SP03-001	Carbazole	170	2.9	0.145	0.421	4.50E-03		
								<u> </u>
SP06-002	Benzene	90	0.78	4.116	3.21	1.20E-169	0.025	<1
	Naphthalene	90	27	0.24377	6.58	6.77E-294	0.22	<1
	-							
SP06-003	Lead	90	NA	NA	0.2**	6.01E-03	0.1	9.42
SB09-001	Benzene	40	0.19	4.116	0.782	5.37E-113	0.025	<1
	Carbazole	40	3.7	0.145	0.54	6.09E-02		
								
SP10-002	Benzene	100	3.6	4.116	14.82	2.85E-178	0.025	<1
SP10-003	Benzene	100	0.92	4.116	3.79	7.29E-179	0.025	<1
	Naphthalene	100	27	0.24377	6.58	7.52E-310	0.22	<1
SB19-001	Carbazole	155	3.2	0.145	0.464	5.45E-03		

^{(1) * -} Based on groundwater remediation objective for groundwater component of the groundwater ingestion route (IEPA, amended @ 26 III. Reg. 2683. Effective 5 February 2002)

^{(2) ** -} Based upon the TCLP results.

^{(3) -} Toxicity criteria not available for exposure route.

⁽⁴⁾ NA – Not Applicable.

Table 1 Summary of R26 Transport Simulation - Soil Component of the Groundwater Pathway to Chicago River (Continued)

Soil Sample	Constituent	Distance to Downgradient River Bank (ft)	Constituent Concentration in Soil (mg/kg)	Leaching Factor (kg/L)	Groundwater Concentration at Source (mg/L)	Groundwater Concentration at the River (mg/L)	Class II Groundwater Standard* (mg/L)	Distance to Meet Class II Groundwater Standard (ft)
SB24-001	Carbazole	160	4.1	0.145	0.5945	6.77E-03		
SB25-001	Benzene	200	1.5	4.116	6.174	2.46E-253	0.025	<1
SB25-002	Benzene	200	0.22	4.116	0.906	3.60E-254	0.025	<1
	Carbazole	200	5.7	0.145	0.817	7.44E-03		
	Benzo(a)anthrancene	200	14	0.0012	0.017	3.16E-193	0.00065	<1
	Naphthalene	200	28	0.24377	6.83	0.00E+00	0.22	<1
							T	1
SB32-001	Benzene	210	5.2	4.116	21.4	4.41E-259	0.025	<1
		1		1 4116	2.17	(52E 260	0.025	<1
SB32-002	Benzene	210	0.77	4.116	3.17	6.53E-260	0.023	
SP43-002	Lead	220	NA	NA	0.21**	1.74E-03	0.1	9.97
SB47-001	Benzo(a)anthrancene	30	9	0.0012	0.0108	3.07E-75	0.00065	<1
7-001	Naphthalene	30	33	0.24377	8.04	1.76E-168	0.22	<1

^{(1) * -} Based on groundwater remediation objective for groundwater component of the groundwater ingestion route (IEPA, amended @ 26 Ill. Reg. 2683. Effective 5 February 2002)

^{(2) ** -} Based upon the TCLP results.

^{(3) –} Toxicity criteria not available for exposure route.

⁽⁴⁾ NA – Not Applicable.

Table 1 Summary of R26 Transport Simulation - Soil Component of the Groundwater Pathway to Chicago River (Continued)

Soil Sample	Constituent	Distance to Downgradient River Bank (ft)	Constituent Concentration in Soil (mg/kg)	Leaching Factor (kg/L)	Groundwater Concentration at Source (mg/L)	Groundwater Concentration at the River (mg/L)	Class II Groundwater Standard* (mg/L)	Distance to Meet Class II Groundwater Standard (ft)
SB48-001	Benzo(a)anthrancene	10	8.6	0.0012	0.0103	1.36E-43	0.00065	<1
SB50-002	Benzene	10	2.9	4.116	11.9	1.56E-54	0.025	<1
	Ethylbenzene	10	30	1.3374	40.122	8.49E-101	1.0	<1
	Naphthalene	10	44	0.24377	9.04	3.90E-96	0.22	<1
								·
SB51-001	Benzene	10	3.7	4.116	15.2	1.91E-54	0.025	<1
	Carbazole	10	4.8	0.145	0.688	3.26E-01		
	Benzo(a)anthrancene	10	17	0.0012	0.0204	2.59E-43	0.00065	<1
	Naphthalene	10	67	0.24377	13.80	5.52E-96	0.22	<1
SB52-001	Benzene	70	2.6	4.116	10.7	7.22E-149	0.025	<1
2222	Naphthalene	70	22	0.24377	5.36	5.73E-259	0.22	<1

November 2005

^{(1) * -} Based on groundwater remediation objective for groundwater component of the groundwater ingestion route (IEPA, amended @ 26 Ill. Reg. 2683. Effective 5 February 2002)

^{(2) –} Toxicity criteria not available for exposure route.

Table 1 Summary of R26 Transport Simulation - Soil Component of the Groundwater Pathway to Chicago River (Continued)

Soil Sample	Constituent	Distance to Downgradient River Bank (ft)	Constituent Concentration in Soil (mg/kg)	Leaching Factor (kg/L)	Groundwater Concentration at Source (mg/L)	Groundwater Concentration at the River (mg/L)	Class II Groundwater Standard* (mg/L)	Distance to Meet Class II Groundwater Standard (ft)
SB53-002	Benzene	10	0.21	4.116	0.864	1.08E-55	0.025	<1
	Carbazole	10	5.1	0.145	0.731	3.47E-01		
	Benzo(a)anthrancene	10	14	0.0012	0.0168	2.14E-43	0.00065	<1
	Naphthalene	10	41	0.24377	9.99	4.01E-96	0.22	<1
SB54-001	Benzene	70	5.7	4.116	23.5	1.58E-148	0.025	<1
	Ethylbenzene	70	25	1.3374	33.345	3.16E-272	1.0	<1
	Naphthalene	70	110	0.24377	22.6	2.41E-258	0.22	<1
SB58-001	Carbazole	15	6.8	0.145	0.986	3.24E-01		
	Benzo(a)anthracene	15	14	0.0012	0.0168	4.01E-53	0.00065	<1

Notes:

^{(1) * -} Based on groundwater remediation objective for groundwater component of the groundwater ingestion route (IEPA, amended @ 26 Ill. Reg. 2683. Effective 5 February 2002)

^{(2) –} Toxicity criteria not available for exposure route.

DATASHEETS

Datasheet A: Some Inputs of R26 Migration Simulation

Parameter	Units	Value
Thickness of Unsaturated Zone	ft	3.7
Thickness of Saturated Zone	ft	16.3
Soil Type (Saturated Zone)	ft	Silty clay
Total Organic Carbon	%	2.27
Hydraulic Gradient (i)	unitless	0.0126
Hydraulic Conductivity (K)	cm/s	5.37 x 10 ⁻⁹ *

Note:

^{1) *} Site geophysical testing results show that the hydraulic conductivity is 5.37 x 10⁻⁹ cm/s. The K value from the field is too small to be accepted by TACO Plus software. Therefore, a conservative value of 5.37 x 10⁻⁸ cm/s is used in the calculations.

Datasheet B: Physical Soil Parameters for the RBCA Equations

Area(s)/Location(s) at the site, if applicable:

Predominant Soil Type (e.g., clay, sand, silty clay, etc.):

Surface (top 1 meter) or Subsurface (below 1 meter):

Site-specific values [i.e., field measurements (F =) or calculated values using the SSL equation (Sxx =)] are to be reported if they are used in developing the Tier 2 cleanup objectives. Acceptable procedures for obtaining these values are identified in Appendix C, Table F of TACO.

Parameter	Soil Type	Default Value	Units	Field Measurement or Calculated	Value
	Subsurface and/or Subsurface soils				
ρb	G 1	1.5 2.0	kg/L	F =	
(Soil Bulk Density)	Gravel	1.8			
	Sand	1.6		Surface	1.70
	Silt Clay	1.7		Subsurface	1.70
W	Surface and/or	0.1			
(Moisture Content)	Subsurface Soils		gwater/gsoil		
,	Surface Soils	0.1	(unitless)		
	Subsurface Soils	0.2			
foc	Surface Soils	0.006	g/g	Surface	
(Organic Carbon Content)	Subsurface Soils	0.002	(unitless)	Subsurface	0.002
$\theta_{\mathtt{T}}$	Surface and/or				
(Total Soil Porosity)	Subsurface Soils	0.43			
	Gravel	0.25	cm ³ /cm ³ _{soil}		
	Sand	0.32	(unitless)		
	Silt	0.40		Surface	0.00
	Clay	0.36		Subsurface	0.36

Datasheet B: Physical Soil Parameters for the RBCA Equation (Continued)

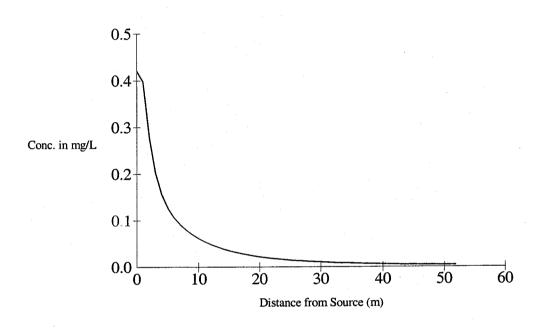
Parameter	Soil Type	Default Value	Units	Field Measurement or Calculated	Value
θ_{as}	Surface Soils	0.28			
(Air-filled Soil Porosity)	Subsurface Soils	0.13			
,	Gravel	0.05	cm ³ _{air} /cm ³ _{soil}		
	Sand	0.14	(unitless)		
	Silt	0.24		Surface	0.00
	Clay	0.19		Subsurface	0.19
$\theta_{ m ws}$	Surface Soils	0.15			
(Water-filled Soil	Subsurface Soils	0.30			
Porosity)	Gravel	0.20	cm ³ _{water} /cm ³ _{soil}		
	Sand	0.18	(unitless)		
	Silt	0.16		Surface	0.00
	Clay	0.17		Subsurface	0.17

CALCULATIONS FOR CONCENTRATIONS AT THE NORTH BRANCH OF THE CHICAGO RIVER

SP03-001

Calculated Ground Water Information

Carbazole



Distance to Meet Ground Water Objectives

<u>Class I</u> <u>Class II</u> Met Met

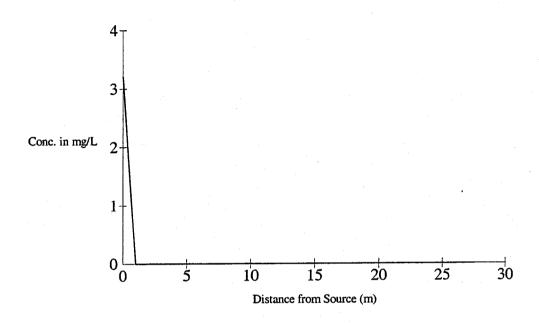
Distance from Source (m)	Calculated Concentration (mg/L)
0	4.21E-01
1	3.98E-01
2	2.81E-01
3	2.02E-01
4	1.56E-01
5	1.27E-01
6	1.06E-01
7	9.13E-02
8	7.94E-02
9	6.98E-02
10	6.16E-02
11	5.47E-02
12	4.88E-02
13	4.36E-02

Distance from Source (m)	Calculated Concentration (mg/L)
14	3.92E-02
15	3.53E-02
16	3.19E-02
17	2.90E-02
18	2.64E-02
19	2.42E-02
20	2.21E-02
21	2.04E-02
22	1.88E-02
23	1.74E-02
24	1.61E-02
25	1.50E-02
26	1.39E-02
27	1.30E-02
28	1.22E-02
29	1.14E-02
30	1.07E-02
31	1.01E-02
32	9.50E-03
33	8.96E-03
34	8.47E-03
35	8.02E-03
36	7.60E-03
37	7.22E-03
38	6.86E-03
39	6.53E-03
40	6.22E-03
41	5.93E-03
42	5.66E-03
43	5.43E-03
44	5.30E-03
45	5.19E-03
46	5.07E-03
47	4.97E-03
48	4.86E-03
49	4.76E-03
50	4.67E-03
51	4.58E-03
51.816	4.50E-03

SP06-002

Calculated Ground Water Information

Benzene



Distance to Meet Ground Water Objectives

 Class I
 Class II

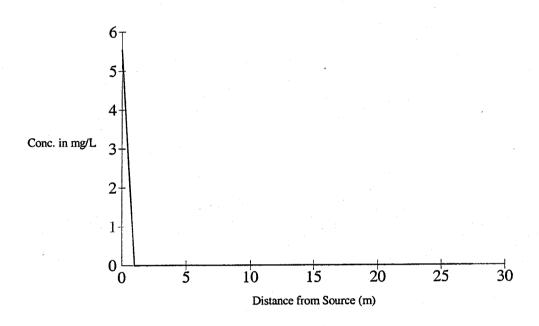
 0.02 m.
 0.01 m.

Distance from Source (m)	Calculated Concentration (mg/L)
0	3.21E+00
1	1.29E-30
2	3.39E-44
3	1.20E-54
4	1.86E-63
5	3.30E-71
6	3.27E-78
7	1.20E-84
8	1.22E-90
9	2.89E-96
10	1.38E-101
11	1.19E-106
12	1.73E-111
13	3.97E-116

Distance from Source (m)	Calculated Concentration (mg/L)
14	1.36E-120
15	6.68E-125
16	4.54E-129
17	4.16E-133
18	4.98E-137
19	7.65E-141
20	1.48E-144
21	3.53E-148
22	1.03E-151
23	3.58E-155
24	1.49E-158
25	7.26E-162
26	4.12E-165
27	2.70E-168
27.43	1.20E-169

Calculated Ground Water Information

Naphthalene



Distance to Meet Ground Water Objectives

 Class I
 Class II

 0.00 m.
 0.00 m.

Distance from Source (m)	Calculated Concentration (mg/L)
. 0	5.55E+00
1	4.06E-54
2	1.49E-77
3	1.45E-95
4	9.61E-111
5	4.14E-124
6	3.46E-136
7	2.73E-147
8	1.27E-157
9	2.50E-167
10	1.65E-176
11	3.07E-185
12	1.39E-193
13	1.38E-201

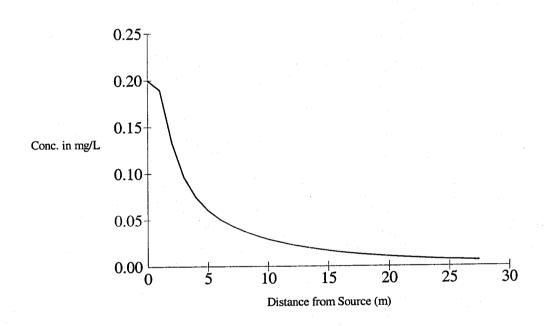
Distance from Source (m)	Calculated Concentration (mg/L)
14	2.75E-209
15	1.02E-216
16	6.63E-224
. 17	7.18E-231
18	1.24E-237
19	3.28E-244
20	1.29E-250
21	7.29E-257
22	5.79E-263
23	6.31E-269
24	9.25E-275
25	1.79E-280
26	4.50E-286
27	1.45E-291
27.43	6.77E-294

SP06-003

Peoples Gas - Former Willow Street Station

Calculated Ground Water Information

Lead



Distance to Meet Ground Water Objectives

 Class I
 Class II

 24.28 m.
 2.87 m.

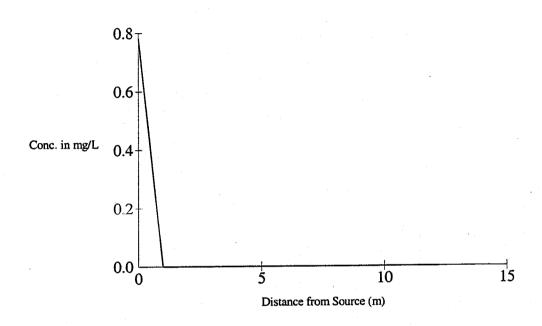
Distance from Source (m)	Calculated Concentration (mg/L)
0	2.00E-01
1	1.89E-01
2	1.33E-01
3	9.63E-02
4	7.43E-02
5	6.03E-02
6	5.06E-02
7	4.34E-02
8	3.78E-02
9	3.32E-02
10	2.93E-02
11	2.60E-02
12	2.32E-02
13	2.07E-02

Distance from Source (m)	Calculated Concentration (mg/L)
14	1.86E-02
15	1.68E-02
16	1.52E-02
17	1.38E-02
18	1.26E-02
19	1.15E-02
20	1.05E-02
21	9.69E-03
22	8.93E-03
23	8.26E-03
24	7.66E-03
25	7.12E-03
26	6.63E-03
27	6.19E-03
27.43	6.01E-03

SB09-001

Calculated Ground Water Information

Benzene



Distance to Meet Ground Water Objectives

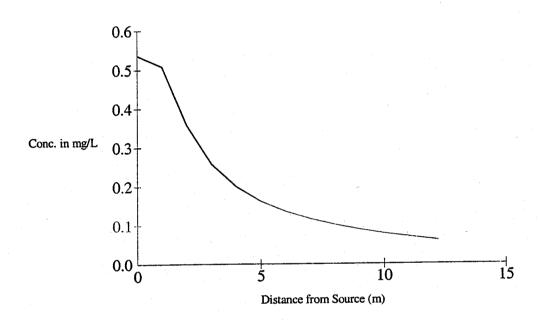
Class I Class II

Met Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	7.82E-01
1	3.15E-31
2	8.26E-45
3	2.91E-55
4	4.54E-64
5	8.03E-72
6	7.96E-79
7	2.91E-85
8	2.98E-91
9	7.05E-97
10	3.36E-102
11	2.91E-107
12	4.23E-112
12.19	5.37E-113

Calculated Ground Water Information

Carbazole



Distance to Meet Ground Water Objectives

<u>Class II</u> <u>Class II</u>

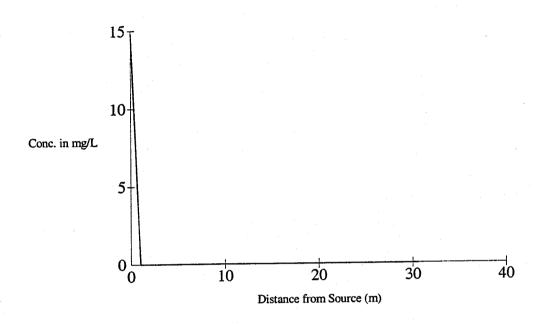
Met Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	5.36E-01
1	5.08E-01
2	3.58E-01
3	2.58E-01
4	1.99E-01
5	1.62E-01
6 -	1.36E-01
7	1.16E-01
8	1.01E-01
9	8.90E-02
10	7.86E-02
11	6.98E-02
12	6.22E-02
12.19	6.09E-02

SP10-002

Calculated Ground Water Information

Benzene



Distance to Meet Ground Water Objectives

 Class I
 Class II

 0.03 m.
 0.02 m.

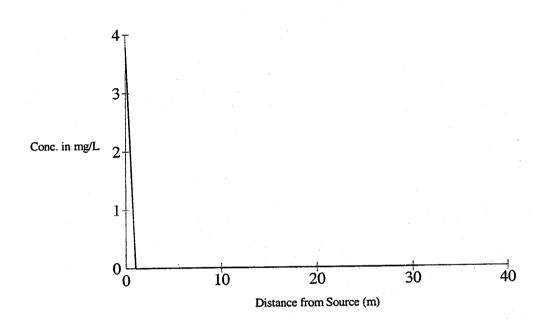
Distance from Source (m)	Calculated Concentration (mg/L)
0	1.48E+01
1	5.96E-30
2	1.56E-43
3	5.52E-54
4	8.60E-63
5	1.52E-70
6	1.51E-77
7.	5.52E-84
8	5.64E-90
9	1.34E-95
10	6.36E-101
11	5.51E-106
12	8.01E-111
13	1.83E-115

Distance from Source (m)	Calculated Concentration (mg/L)
14	6.27E-120
15	3.08E-124
16	2.10E-128
17	1.92E-132
18	2.30E-136
19	3.53E-140
20	6.82E-144
21	1.63E-147
22	4.73E-151
23	1.65E-154
24	6.87E-158
25	3.35E-161
26	1.90E-164
27	1.25E-167
28	9.35E-171
29	7.98E-174
30	7.68E-177
30.48	2.85E-178

SP10-003

Calculated Ground Water Information

Benzene



Distance to Meet Ground Water Objectives

<u>Class II</u> <u>Class II</u>

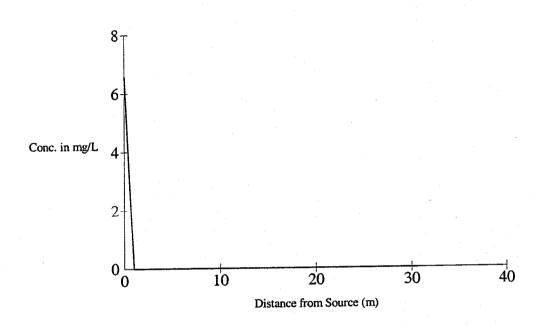
0.02 m. 0.01 m.

Calculated Concentration (mg/L)
3.79E+00
1.52E-30
4.00E-44
1.41E-54
2.20E-63
3.89E-71
3.86E-78
1.41E-84
1.44E-90
3.41E-96
1.63E-101
1.41E-106
2.05E-111
4.68E-116

Distance from Source (m)	Calculated Concentration (mg/L)
14	1.60E-120
15	7.88E-125
16	5.36E-129
17	4.90E-133
18	5.88E-137
19	9.02E-141
20	1.74E-144
21	4.16E-148
22	1.21E-151
23	4.23E-155
24	1.76E-158
25	8.56E-162
26	4.86E-165
27	3.19E-168
28	2.39E-171
29	2.04E-174
30	1.96E-177
30.48	7.29E-179

Calculated Ground Water Information

Naphthalene



Distance to Meet Ground Water Objectives

Class II Class II

Met Met

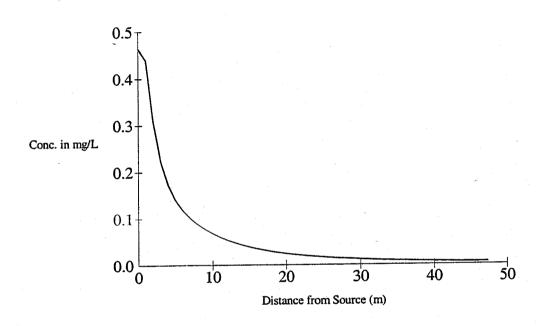
Distance from Source (m)	Calculated Concentration (mg/L)
0	6.58E+00
1	4.82E-54
2	1.77E-77
3	1.72E-95
4	1.14E-110
5	4.91E-124
6	4.11E-136
7	3.24E-147
8	1.51E-157
9	2.97E-167
10	1.96E-176
11	3.64E-185
12	1.65E-193
13	1.64E-201

Distance from Source (m)	Calculated Concentration (mg/L)
14	3.26E-209
15	1.21E-216
16	7.87E-224
17	8.52E-231
18	1.47E-237
19	3.89E-244
20	1.53E-250
21	8.65E-257
22	6.87E-263
23	7.49E-269
24	1.10E-274
25	2.13E-280
26	5.34E-286
27	1.72E-291
28	6.98E-297
29	3.53E-302
30	2.21E-307
30.48	7.52E-310

SB19-001

Calculated Ground Water Information

Carbazole



Distance to Meet Ground Water Objectives

Class II Class II

Met Met

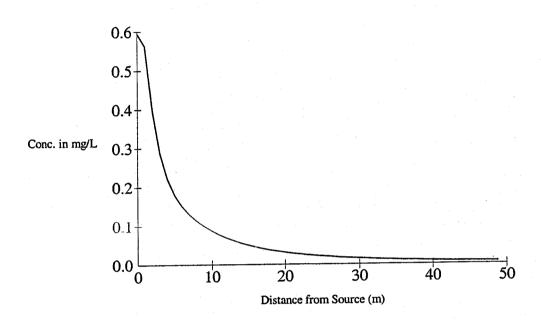
Distance from Source (m)	Calculated Concentration (mg/L)
. 0	4.64E-01
1	4.39E-01
2	3.10E-01
3	2.23E-01
4	1.72E-01
5	1.40E-01
6	1.17E-01
7	1.01E-01
8	8.76E-02
9	7.70E-02
10	6.80E-02
11	6.04E-02
12	5.38E-02
13	4.81E-02

Distance from Source (m)	Calculated Concentration (mg/L)
14	4.32E-02
15	3.90E-02
16	3.53E-02
17	3.20E-02
18	2.92E-02
19	2.66E-02
20	2.44E-02
21	2.25E-02
22	2.07E-02
23	1.92E-02
24	1.78 E-0 2
25	1.65E-02
26	1.54E-02
27	1.44E-02
28	1.34E-02
29	1.26E-02
30	1.18E-02
31	1.11 E-0 2
32	1.05E-02
33	9.89E-03
34	9.35E-03
35	8.85E-03
36	8.39E-03
37	7.96E-03
38	7.57E-03
39	7.20E-03
40	6.86E-03
41	6.54E-03
42	6.25E-03
43	5.99E-03
44	5.85 E-0 3
45	5.72E-03
46	5.60E-03
47	5.48E-03
47.24	5.45E-03

SB24-001

Calculated Ground Water Information

Carbazole



Distance to Meet Ground Water Objectives

<u>Class II</u>

Met Met

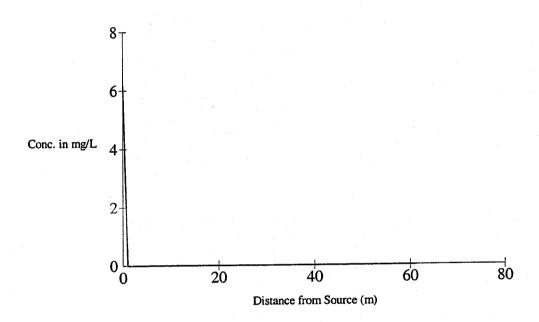
Distance from Source (m)	Calculated Concentration (mg/L)
0	5.95E-01
1	5.63E-01
2	3.97E-01
3	2.86E-01
4	2.21E-01
5	1.79E-01
6	1.50E-01
7	1.29E-01
8	1.12E-01
9	9.86E-02
10	8.71E-02
11	7.73E-02
12	6.89E-02
13	6.17E-02

Distance from Source (m)	Calculated Concentration (mg/L)
14	5.54E-02
15	4.99E-02
16	4.52E-02
17	4.10E-02
18	3.74E-02
19	3.41E-02
20	3.13E-02
21	2.88E-02
22	2.65E-02
23	2.46E-02
24	2.28E-02
25	2.12E-02
26	1.97E-02
27	1.84E-02
28	1.72E-02
29	1.61E-02
30	1.51E-02
31	1.42E-02
32	1.34E-02
33	1.27E-02
34	1.20E-02
35	1.13E-02
36	1.07E-02
37	1.02E-02
38	9.70E-03
39	9.23E-03
40	8.79E-03
41	8.38E-03
42	8.00E-03
43	7.67E-03
44	7.50E-03
45	7.33E-03
46	7.17E-03
47	7.02E-03
48	6.87E-03
48.77	6.77E-03

SP25-001

Calculated Ground Water Information

Benzene



Distance to Meet Ground Water Objectives

 Class I
 Class II

 0.02 m.
 0.02 m.

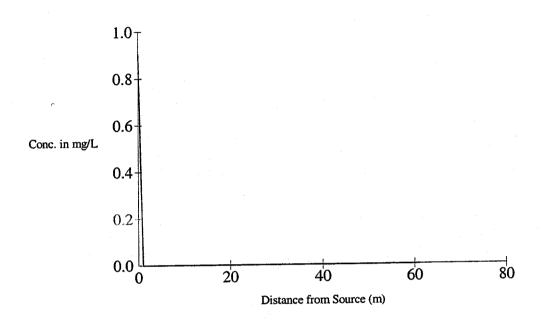
Distance from Source (m)	Calculated Concentration (mg/L)
0	6.17E+00
1	2.48E-30
2	6.52E-44
3	2.30E-54
4	3.58E-63
5	6.34E-71
6	6.29E-78
7	2.30E-84
8	2.35E-90
9	5.56E-96
10	2.65E-101
11	2.30E-106
12	3.34E-111
13	7.64E-116

Distance from Source (m)	Calculated Concentration (mg/L)
1.4	2 61E-120
14	1.28E-124
15	8.74E-129
16	7.99E-133
17	
18	9.58E-137
19	1.47E-140 2.84E-144
20	
21	6.78E-148 1.97E-151
22	
23	6.89E-155 2.86E-158
24	2.86E-138 1.40E-161
25	
26	7.93E-165
27	5.19E-168
28	3.90E-171
29	3.32E-174
30	3.20E-177
31	3.46E-180
32	4.17E-183
33	5.59E-186
34	8.29E-189
35	1.35E-191
36	2.41E-194
37	4.71E-197
38	9.99E-200
39	2.30E-202
40	5.72E-205
41	1.53E-207
42	4.42E-210
43	1.37E-212
44	4.63E-215
45	1.67E-217
46	6.39E-220
47	2.60E-222
48	1.12E-224
49	5.13E-227
50	2.48E-229
51	1.26E-231
52	6.76E-234
53	3.81E-236
54	2.26E-238
55	1.40E-240
56	9.11E-243
57	6.19E-245
58	4.40E-247
59	3.26E-249
60	2.52E-251
60.96	2.46E-253

SB25-002

Calculated Ground Water Information

Benzene



Distance to Meet Ground Water Objectives

Class II Class II

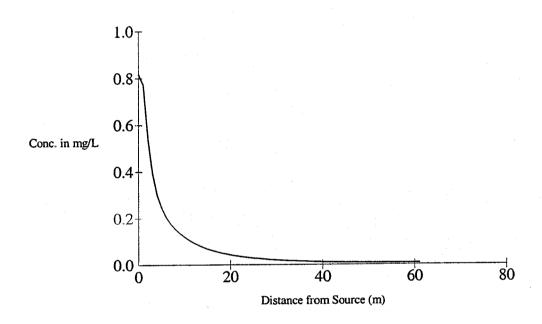
Met Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	9.06E-01
1	3.64E-31
2 .	9.56E-45
3	3.37E-55
4	5.26E-64
5	9.30E-72
6	9.22E-79
7	3.37E-85
8	3.45E-91
9	8.16E-97
10	3.89E-102
11	3.37E-107
12	4.89E-112
13	1.12E-116

Distance from Source (m)	Calculated Concentration (mg/L)
1.4	2 925 101
14	3.83E-121
15	1 88E-125
16	1.28E-129
17	1.17E-133
18	1.40E-137
19	2.16E-141
20	4.17E-145
21	9.95E-149
22	2.89E-152
23	1.01E-155
24	4.20E-159
25	2.05E-162
26	1.16E-165
27	7.62E-169
28	5.72E-172
29	4.87E-175
30	4.69E-178
31	5.07E-181
32	6.12E-184
33	8.20E-187
34	1.22E-189
35	1.98E-192
36	3.54E-195
37	6.90E-198
38	1.46E-200
39	3.37E-203
40	8.39E-206
41	2.25E-208
42	6.48E-211
43	2.01E-213
43 44	6.78E-216
45	2.44E-218
46	9.37E-221
47	3.82E-223
48	1.65E-225
49	7.53E-228
50	3.63E-230
51	1.85E-232
52	9.92E-235
53	5.59E-237
54	3.31E-239
55	2.06E-241
56	1.34E-243
57	9.08E-246
58	6.45E-248
59	4.78E-250
60	3.70E-252
60.96	3.60E-254

Calculated Ground Water Information

Carbazole



Distance to Meet Ground Water Objectives

<u>Class II</u>

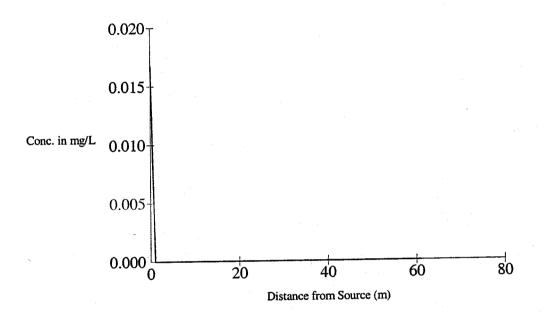
Met Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	8.17E-01
i	7.74E-01
2	5.45E-01
3	3.93E-01
4	3.04E-01
5	2.46E-01
6	2.07E-01
7	1.77E-01
8	1.54E-01
9	1.35E-01
10	1.20E-01
11	1.06E-01
12	9.47E-02
13	8.47E-02

Distance from Source (m)	Calculated Concentration (mg/L)
14	7.61E-02
15	6.86E-02
16	6.21E-02
17	5.63E-02
18	5.13E-02
19	4.69E-02
20	4.30E-02
20 21	3.96E-02
22	3.65E-02
23	3.37E-02
24	3.13E-02
25	2.91E-02
25 26	2.71E-02
26 27	2.53E-02
28	2.36E-02
	2.22E-02
29	2.08E-02
30	1.96E-02
31 32	1.84E-02
	1.74E-02
33	1.65E-02
34	1.56E-02
35	1.48E-02
36	1.40E-02
37	1.33E-02
38	1.27E-02
39 40	1.21E-02
41	1.15E-02
42	1.10E-02
43	1.05E-02
44	1.03E-02
45	1.01E-02
46	9.86E-03
47	9.65E-03
48	9.44E-03
49	9.25E-03
50	9.07E-03
51	8.89E-03
52	8.72E-03
53	8.55E-03
54	8.40E-03
55	8.24E-03
56	8.10E-03
57	7.95E-03
58	7.82E-03
59	7.68E-03
60	7.56E-03
60.96	7.44E-03
= 	

Calculated Ground Water Information

Benzo(a)anthracene



Distance to Meet Ground Water Objectives

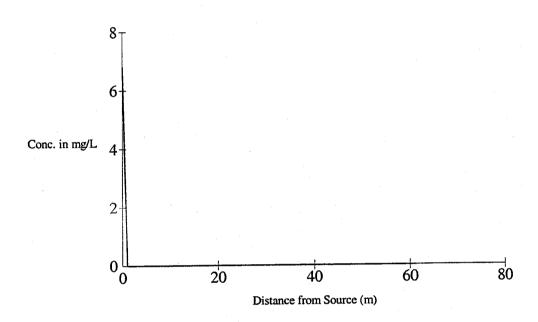
Class I	Class II
0.02 m.	0.01 m.

Distance from Source (m)	Calculated Concentration (mg/L)
0	1.68E-02
1	6.82E-25
2	3.85E-35
3	4.86E-43
4	1.08E-49
5 ~	1.50E-55
6	7.71E-61
7	1.06E-65
8	3.19E-70
9	1.80E-74
10	1.72E-78
11	2.59E-82
12	5.75E-86
	1.80E-89
13	I.QOD-O7

Distance from Source (m)	Calculated Concentration (mg/L)
14	7.63E-93
15	4.25E-96
16	3.03E-99
17	2.70E-102
18	2.94E-105
19	3.88E-108
20	6.08E-111
20 21	1.12E-113
22	2.39E-116
23	5.86E-119
24	1.64E-121
25	5.17E-124
26	1.83E-126
27	7.22E-129
28	3.16E-131
29	1.52E-133
30	8.03E-136
31	4.63E-138
32	2.90E-140
33	1.97E-142
34	1.44E-144
35	1.13E-146
36	9.53E-149
37	8.59E-151
38	8.24E-153
39	8.42E-155
40	9.11E-157
41	1.04E-158
42	1.26E-160
43	1.62E-162
44	2.22E-164
45	3.19E-166
46	4.82E-168
47	7.61E-170
48	1.26E-171
49	2.16E-173
50	3.89E-175
51	7.27E-177
52	1.41E-178
53	2.85E-180
54	5.97E-182
55	1.30E-183
56	2.91E-185
57	6.78E-187
58	1.63E-188
59	4.04E-190
60	1.04E-191 3.16E-193
60.96	3.10E-173

Calculated Ground Water Information

Naphthalene



Distance to Meet Ground Water Objectives

 Class I
 Class II

 Met
 Met

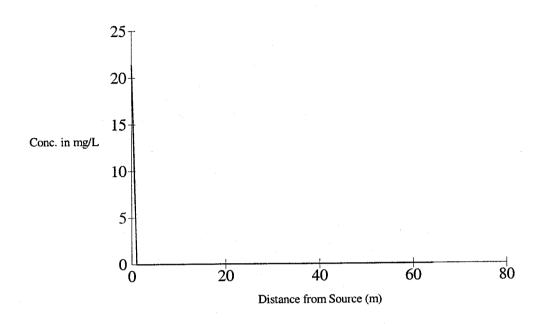
Distance from Source (m)	Calculated Concentration (mg/L)
0	6.83E+00
i	5.00E-54
$\tilde{2}$	1.83E-77
- 3	1.78E-95
4	1.18E-110
5	5.10E-124
6	4.26E-136
7	3.36E-147
8	1.56E-157
9	3.08E-167
10	2.04E-176
11	3.77E-185
12	1.71E-193
13	1.70E-201

Distance from Source (m)	Calculated Concentration (mg/L)
	2 205 200
14	3.38E-209
15	1.25E-216
16	8.16E-224
17	8.84E-231
18	1.53E-237
19	4.04E-244
20	1.59E-250
21	8.97E-257
22	7.12E-263
23	7.77E-269
24	1.14E-274
25	2.20E-280
26	5.54E-286
27	1.78E-291
28	7.24E-297
29	3.66E-302
30	2.29E-307
31	1.74E-312
32	1.60E-317
33	1.68E-322
34	0.00E+00
35	0.00E+00
36	0.00E+00
37	0.00E+00
38	0.00E+00
39	0.00E+00
40	0.00E+00
41	0.00E+00
42	0.00E+00
43	0.00E+00
44	0.00E+00
45	0.00E+00
46	0.00E+00
47	0.00E+00
48	0.00E+00
49	0.00E+00
50	0.00E+00
51	0.00E+00
52	0.00E+00
53	0.00E+00
54	0.00E+00
55	0.00E+00
56	0.00E+00
57	0.00E+00
58	0.00E+00
59	0.00E+00
60	0.00E+00
60.96	0.00E+00

SB32-001

Calculated Ground Water Information

Benzene



Distance to Meet Ground Water Objectives

Class II Class II

Met Met

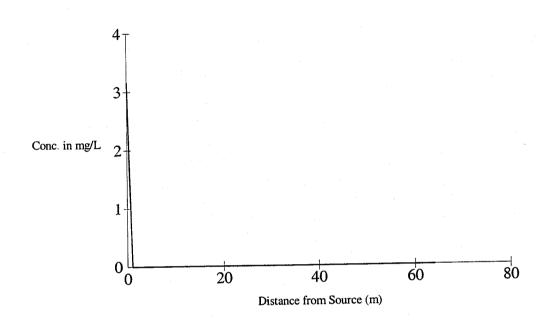
Distance from Source (m)	Calculated Concentration (mg/L)
0	2.14E+01
1	8.61E-30
2	2.26E-43
3	7.97E-54
4	1.24E-62
5	2.20E-70
6	2.18E-77
7	7.97E-84
8	8.15E-90
9	1.93E-95
10	9 19E-101
11	7.96E-106
12	1.16E-110
13	2.65E-115

Distance from Source (m)	Calculated Concentration (mg/L)
14	9.06E-120
15	4.45E-124
16	3.03E-128
17	2.77E-132
18	3.32E-136
19	5.10E-140
20	9.85E-144
21	2.35E-147
22	6.84E-151
23	2.39E-154
24	9 92E-158
25	4.84E-161
26	2.75E-164
27	1.80E-167
28	1.35E-170
28 29	1.15E-173
30	1.11E-176
	1.20E-179
31	1.45E-182
32	1.94E-185
33	2.87E-188
34	4.68E-191
35	8.36E-194
36	1 63E-196
37	3.46E-199
38	7.97E-202
39	1.98E-204
40	
41	5.31E-207
42	1.53E-209 4.75E-212
43	1.60E-214
44	5.78E-217
45	
46	2.21E-219
47	9.02E-222
48	3.89E-224
49	1.78E-226 8.59E-229
50	
51	4.37E-231
52	2.34E-233
53	1.32E-235
54	7.83E-238
55	4.86E-240
56	3.16E-242
57	2.15E-244
58	1.53E-246
59	1.13E-248
60	8.73E-251
61	7.03E-253
62	5.88E-255
63	5.12E-257
64	4.62E-259
64.01	4.41E-259

SB32-002

Calculated Ground Water Information

Benzene



Distance to Meet Ground Water Objectives

Class II Class II

Met Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	3.17E+00
1	1.28E-30
$\hat{\mathbf{z}}$	3.35E-44
3	1.18E-54
4	1.84E-63
5	3.25E-71
6	3.23E-78
7	1.18E-84
8	1.21E-90
9	2.86E-96
10	1.36E-101
11	1.18E-106
12	1.71E-111
13	3.92E-116

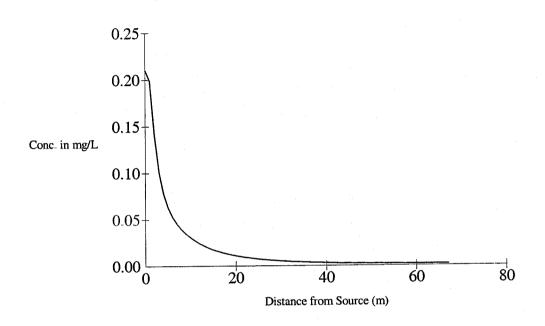
Distance from Source (m)	Calculated Concentration (mg/L)
14	1.34E-120
15	6.59E-125
16	4.49E-129
17	4.10E-133
18	4.92E-137
19	7.55E-141
20	1.46E-144
21	3.48E-148
22	1.01E-151
23	3.54E-155
24	1.47E-158
25	7.17E-162
26	4.07E-165
27	2.67E-168
28	2.00E-171
29	1.71E-174
30	1.64E-177
31	1.78E-180
32	2.14E-183
33	2.87E-186
34	4.25E-189
35	6.93E-192
36	1.24E-194
37	2.42E-197
38	5.13E-200
39	1.18E-202
40	2.93E-205
41	7.87E-208
42	2.27E-210
43	7.03E-213
44	2.37E-215
45	8.55E-218
46	3.28E-220
47	1.34E-222
48	5.77E-225
49	2.63E-227
50	1.27E-229
51	6.48E-232
52	3.47E-234
53	1.96E-236
54 "	1.16E-238
55	7.19E-241
56	4.68E-243
57	3.18E-245
58	2.26E-247
58 59	1.67E-249
	1.29E-251
60	1.04E-253
61	8.71E-256
62	7.58E-258
63	6.84E-260
64	6.53E-260
64.01	0.33E-200

SP43-002

Peoples Gas - Former Willow Street Station

Calculated Ground Water Information

Lead



Distance to Meet Ground Water Objectives

 Class I
 Class II

 24.95 m.
 3.04 m.

Calculated Ground Water Concentrations

Distance from Source (m)	Calculated Concentration (mg/L)
0	2.10 E-0 1
1	1.99E-01
$\overline{2}$	1.40E-01
3	1.01E-01
4	7.81E-02
5	6.33E-02
6	5.31E-02
7	4.56E-02
8	3.97E-02
9	3.48E-02
10	3.08E-02
11	2.73E-02
12	2.43E-02
13	2.18E-02

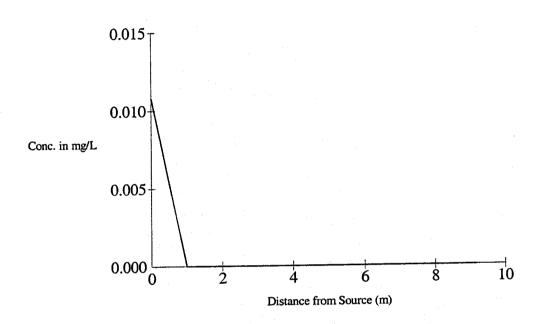
Page 1

Calculated Ground	· · · · · · · · · · · · · · · · · · ·
Distance from Source (m)	Calculated Concentration (mg/L)
14	1.96E-02
15	1.76E-02
16	1.60E-02
17	1.45E-02
18	1.32E-02
19	1.21E-02
20	1.11E-02
20 21	1.02E-02
22	9.38E-03
	8.67E-03
23	
24	8.04E-03
25	7.47E-03
26	6.96E-03
27	6.50E-03
28	6.08E-03
29	5.70E-03
30	5.35E-03
31	5.03E-03
32	4.74E-03
33	4.48E-03
34	4.23E-03
35	4.01E-03
36	3.80E-03
37	3.60E-03
38	3.43E-03
39	3.26E-03
40	3.10E-03
41	2.96E-03
42	2.83E-03
43	2.71E-03
44	2.65E-03
45	2.59E-03
46	2.53E-03
47	2.48E-03
48	2.43E-03
49	2.38E-03
50	2.33E-03
51	2.29E-03
52	2.24E-03
53	2.20E-03
54	2.16E-03
55	2.12E-03
56	2.08E-03
57	2.04E-03
58	2.01E-03
59	1.98E-03
60	1.94E-03
61	1.91E-03
62	1.88E-03
63	1.85E-03
64	1.82E-03
65	1.79E-03
66	1.77E-03
67	1.77E-03 1.74E-03
	1.74E-03
67.06	1./4E-03

SB47-001

Calculated Ground Water Information

Benzo(a)anthracene



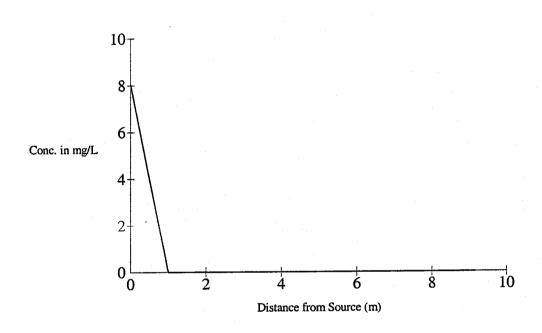
Distance to Meet Ground Water Objectives

Class I	Class II
0.02 m.	0.01 m.

Calculated Concentration (mg/L)
1.08E-02
4.38E-25
2.47E-35
3.13E-43
6.93E-50
9.65E-56
4.96E-61
6.83E-66
2.05E-70
1.16E-74
3.07E-75

Calculated Ground Water Information

Naphthalene



Distance to Meet Ground Water Objectives

Class I Class II

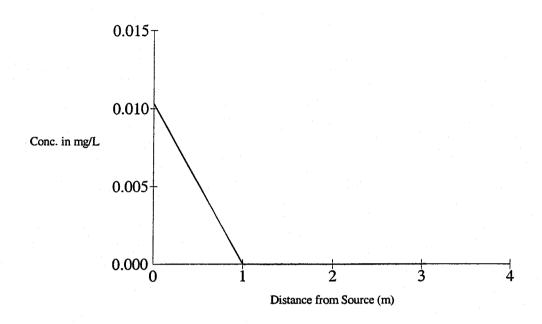
Met Met

Calculated Concentration (mg/L)
8.04E+00
5.89E-54
2.16E-77
2.10E-95
1.39E-110
6.01E-124
5.02E-136
3.96E-147
1.84E-157
3.63E-167
1.76E-168

SB48-001

Calculated Ground Water Information

Benzo(a)anthracene



Distance to Meet Ground Water Objectives

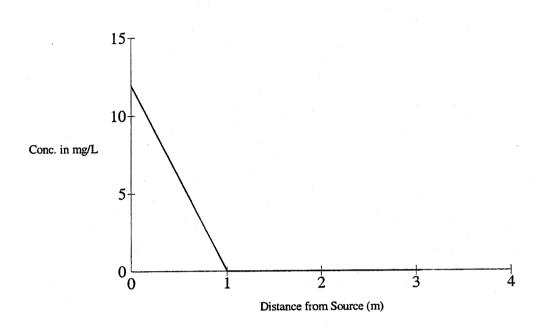
Class I	Class II
Met	Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	1.03E-02
· 1	4.19E-25
2	2.36E-35
3	2.99E-43
3.048	1.36E-43

SB50-002

Calculated Ground Water Information

Benzene



Distance to Meet Ground Water Objectives

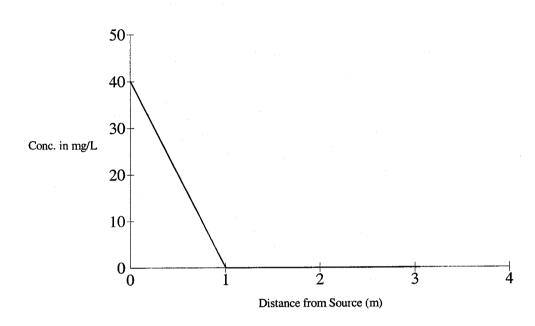
<u>Class II</u> <u>Class II</u>

0.02 m. 0.02 m.

Distance from Source (m)	Calculated Concentration (mg/L)
0	1.19E+01
1	4.80E-30
2	1.26E-43
3	4.45E-54
3.048	1.56E-54

Calculated Ground Water Information

Ethylbenzene



Distance to Meet Ground Water Objectives

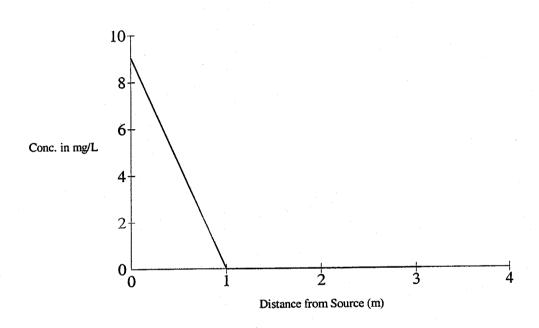
<u>Class II</u>

Met Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	4.01E+01
1	2.68E-56
2	5.39E-81
3	5.66E-100
3.048	8.49E-101

Calculated Ground Water Information

Naphthalene



Distance to Meet Ground Water Objectives

<u>Class II</u> <u>Class II</u>

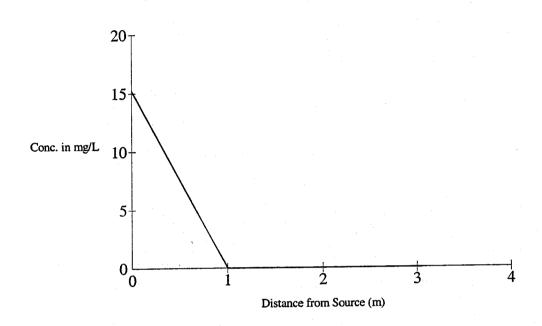
Met Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	9.04E+00
1	6.62E-54
2	2.43E-77
3	2.36E-95
3.048	3.90E-96

SB51-001

Calculated Ground Water Information

Benzene



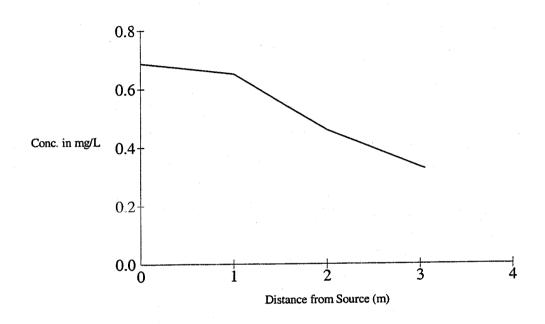
Distance to Meet Ground Water Objectives

Class I	Class II
0.03 m.	0.02 m.

Distance from Source (m)	Calculated Concentration (mg/L)
0	1.52E+01
1	6.13E-30
. 2	1.61E-43
3	5.67E-54
3.05	1.91E-54

Calculated Ground Water Information

Carbazole



Distance to Meet Ground Water Objectives

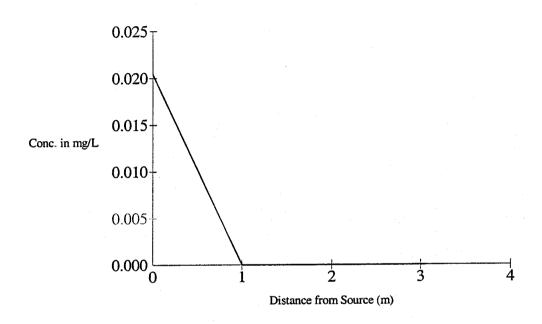
 Class I
 Class II

 Met
 Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	6.88E-01
1	6.52E-01
2	4.59E-01
3	3.31E-01
3.05	3.26E-01

Calculated Ground Water Information

Benzo(a)anthracene



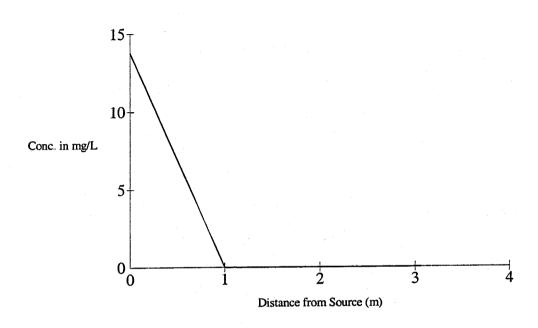
Distance to Meet Ground Water Objectives

Class I	Class I
0.02 m.	0.01 m

Distance from Source (m)	Calculated Concentration (mg/L)
0	2.04E-02
1	8.28E-25
2	4.67E-35
3	5.91E-43
3.05	2.59E-43

Calculated Ground Water Information

Naphthalene



Distance to Meet Ground Water Objectives

Class II Class II

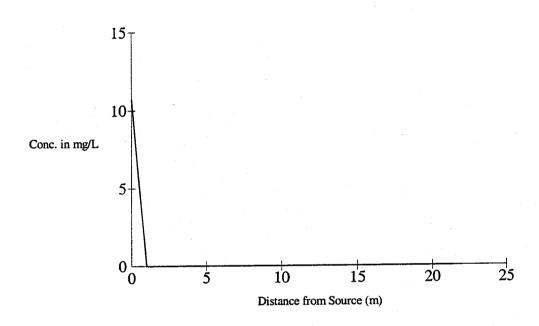
Met Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	1.38E+01
1	1.01E-53
2	3.70E-77
3	3.60E-95
3.05	5.52E-96

SB52-001

Calculated Ground Water Information

Benzene



Distance to Meet Ground Water Objectives

Class II Class II

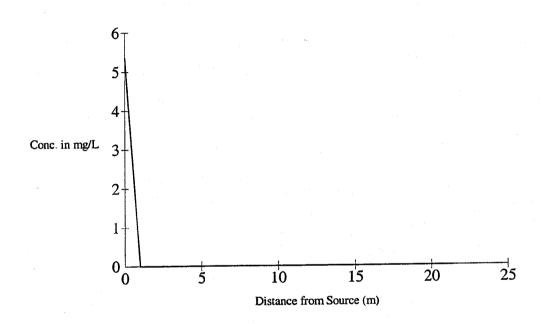
Met Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	1.07E+01
1	4.31E-30
2	1.13E-43
3	3.99E-54
4	6.21E-63
5	1.10E-70
6	1.09E-77
7	3.98E-84
8	4.08E-90
9	9.64E-96
10	4.60E-101
11	3.98E-106
12	5.78E-111
13	1.32E-115

Distance from Source (m)	Calculated Concentration (mg/L)
14	4.53E-120
15	2.23E-124
16	1.51E-128
17	1.39E-132
18	1.66E-136
19	2.55E-140
20	4.93E-144
21	1.18E-147
21.34	7.22E-149

Calculated Ground Water Information

Naphthalene



Distance to Meet Ground Water Objectives

Class II Class II

Met Met

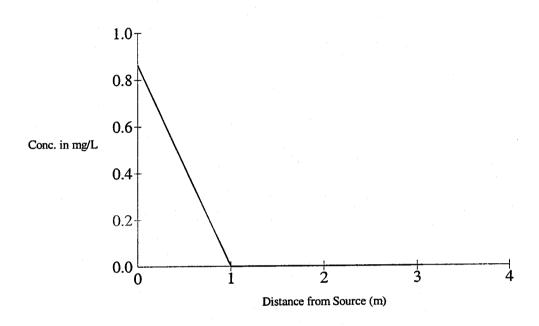
Distance from Source (m)	Calculated Concentration (mg/L)
0	5.36E+00
ĺ	3.93E-54
2	1.44E-77
3	1.40E-95
4	9.29E-111
5	4.00E-124
6	3.35E-136
7	2.64E-147
8	1.23E-157
9	2.42E-167
.10	1.60E-176
11	2.97E-185
12	1.34E-193
13	1.33E-201

Distance from Source (m)	Calculated Concentration (mg/L)
14	2.66E-209
15	9.86E-217
16	6.41E-224
17	6.95E-231
18	1.20E-237
19	3.17E-244
20	1.25E-250
21	7.05E-257
21.34	5.73E-259

SB53-002

Calculated Ground Water Information

Benzene



Distance to Meet Ground Water Objectives

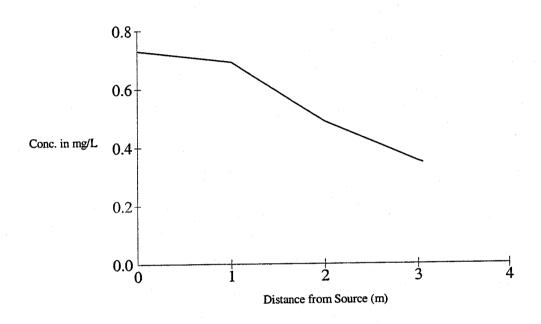
 Class I
 Class II

 Met
 Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	8.64E-01
1	3.48E-31
2	9.13E-45
3	3.22E-55
3.05	1.08E-55

Calculated Ground Water Information

Carbazole



Distance to Meet Ground Water Objectives

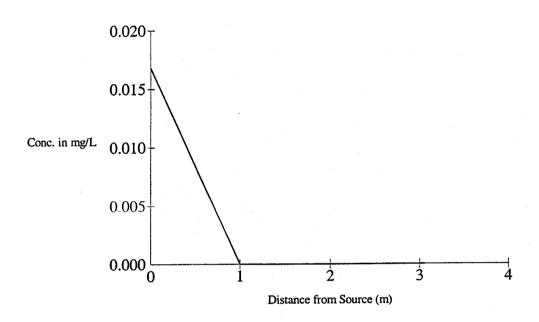
 Class I
 Class II

 Met
 Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	7.31E-01
1	6.92E-01
$\overline{2}$	4.88E-01
3	3.52E-01
3.05	3.47E-01

Calculated Ground Water Information

Benzo(a)anthracene



Distance to Meet Ground Water Objectives

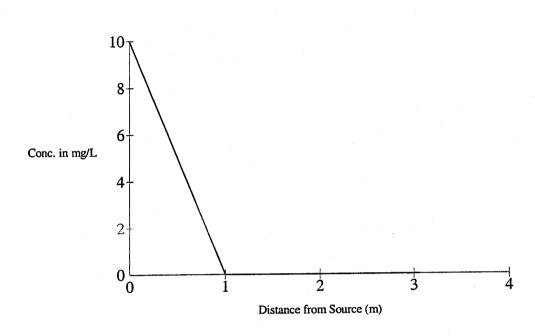
Class I	Class II
0.02 m.	0.01 m.

Distance from Source (m)	Calculated Concentration (mg/L)
0	1.68E-02
1	6.82E-25
2	3.85E-35
3	4.86E-43
3.05	2.14E-43

Former Willow Street Station

Calculated Ground Water Information

Naphthalene



Distance to Meet Ground Water Objectives

<u>Class II</u> <u>Class II</u>

Met Met

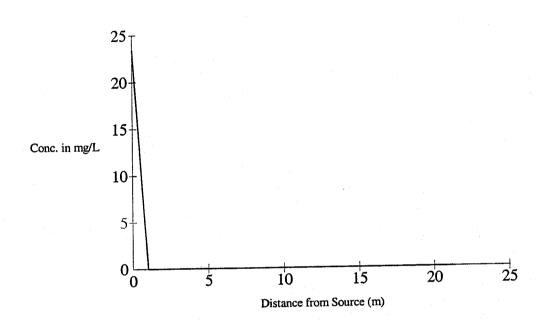
Distance from Source (m)	Calculated Concentration (mg/L)
Ò	9.99E+00
1	7.32E-54
2	2.69E-77
3	2.61E-95
3.05	4.01E-96

SB54-001

Former Willow Street Station

Calculated Ground Water Information

Benzene



Distance to Meet Ground Water Objectives

 Class I
 Class II

 0.03 m.
 0.02 m.

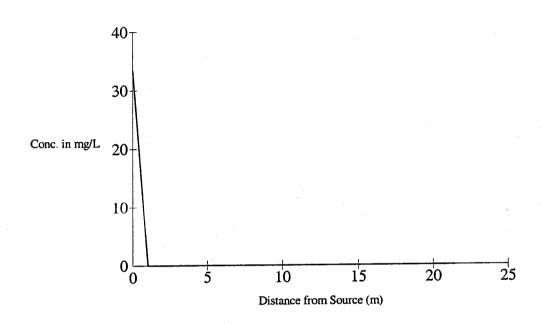
Distance from Source (m)	Calculated Concentration (mg/L)
0	2.35E+01
1	9.44E-30
$\hat{\mathbf{z}}$	2.48E-43
3	8.74E-54
4	1.36E-62
5	2.41E-70
6	2.39E-77
7	8.74E-84
8	8.94E-90
9	2.11E-95
10	1.01E-100
	8.73E-106
11	1.27E-110
12	2.90E-115
13	2.90E-113

Distance from Source (m)	Calculated Concentration (mg/L)
14	9.94E-120
15	4.88E-124
16	3.32E-128
17	3.04E-132
18	3.64E-136
19	5.59E-140
20	1.08E-143
20	2.58E-147
21.34	1.58E-148

Former Willow Street Station

Calculated Ground Water Information

Ethylbenzene



Distance to Meet Ground Water Objectives

Class II Class II

0.00 m. 0.00 m.

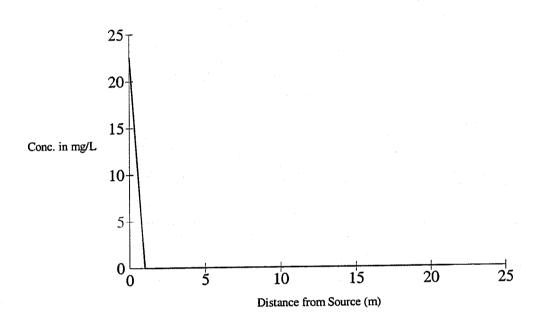
Distance from Source (m)	Calculated Concentration (mg/L)
0	3.34E+01
1	2.23E-56
2	4.49E-81
3	4.72E-100
4	4.78E-116
5	3.94E-130
6	7.39E-143
7	1.47E-154
8	1.90E-165
9	1.13E-175
10	2.39E-185
11	1.51E-194
12	2.43E-203
13	8.95E-212

Distance from Source (m)	Calculated Concentration (mg/L)
. 14	6.87E-220
15	1.02E-227
16	2.71E-235
17	1.24E-242
18	9.27E-250
19	1.09E-256
20	1.93E-263
21	5.04E-270
21.34	3.16E-272

Former Willow Street Station

Calculated Ground Water Information

Naphthalene



Distance to Meet Ground Water Objectives

Class II Class II

Met Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	2.26E+01
1	1.66E-53
2	6.07E-77
. 3	5.91E-95
4	3.91E-110
5	1.69E-123
6	1.41E-135
7	1.11E-146
8	5.17E-157
9	1.02E-166
10	6.74E-176
. 11	1.25E-184
12	5.66E-193
13	5.62E-201

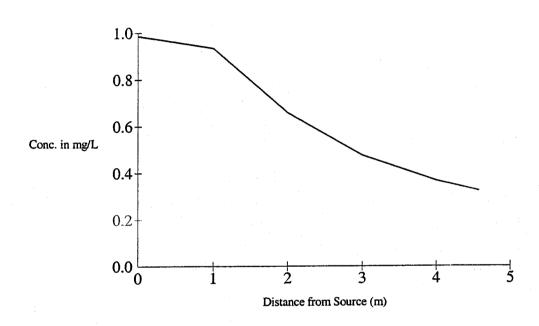
Distance from Source (m)	Calculated Concentration (mg/L)		
14	1.12E-208		
15	4.15E-216		
16	2.70E-223		
17	2.93E-230		
18	5.05E-237		
19	1.34E-243		
20	5.25E-250		
21	2.97E-256		
21.34	2.41E-258		

SB58-001

Former Willow Street Station

Calculated Ground Water Information

Carbazole



Distance to Meet Ground Water Objectives

 Class I
 Class II

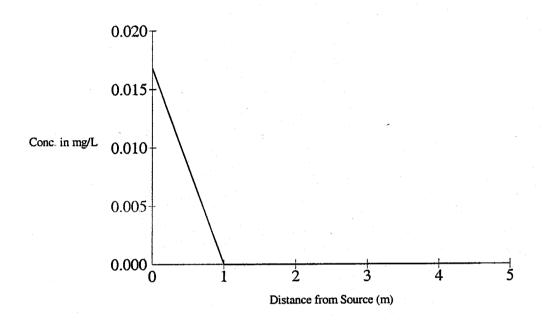
 Met
 Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	9.86E-01
1	9.34E-01
2	6.58E-01
3	4.75E-01
4	3.66E-01
4.572	3.24E-01

Former Willow Street Station

Calculated Ground Water Information

Benzo(a)anthracene



Distance to Meet Ground Water Objectives

Class I	Class II

Met Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	1.68E-02
1	6.82E-25
2	3.85E-35
3	4.86E-43
4	1.08E-49
4.572	4.01E-53

APPENDIX G
GROUNDWATER COMPONENT EVALUATION
(SUPPORTING INFORMATION AND CALCULATIONS)
THE FORMER WILLOW STREET STATION
MANUFACTURED GAS PLANT SITE,
1640 NORTH KINGSBURY PORTION

Table 1 Summary of R26 Simulation of Contaminant Migration in Groundwater

Sample Point	Chemical	Concentration in Groundwater in the Source (mg/L)	Distance to the River Bank from the Source Point (ft)	Predicted Concentration at Property Line (mg/L)	Class II Criteria (mg/L)	Meet Class II Criteria (ft)	Distance to Meet Class II Criteria (ft)
MW01-001	Benzene	0.21	20	2.63E-73	0.025	Yes	<1
	Benzo(a)anthrancene	0.00076	320	6.06E-225	0.00065	Yes	<1
	Copper	1.2	320	6.83E-03	0.65	Yes	8.6
MW05-001	Lead	0.96	320	5.47E-03	0.1	Yes	42.5
	Thallium	0.024	320	1.37E-04	0.02	Yes	4.6

DATASHEETS

Datasheet A: Some Inputs of R26 Migration Simulation

Parameter	Units	Value
Thickness of Unsaturated Zone	ft	3.7
Thickness of Saturated Zone	ft	16.3
Soil Type (Saturated Zone)	ft	Silty clay
Total Organic Carbon	%	2.27
Hydraulic Gradient (i)	unitless	0.0126
Hydraulic Conductivity (K)	cm/s	5.37 x 10 ⁻⁹ *

Note:

^{1) *} Site geophysical testing results show that the hydraulic conductivity is 5.37 x 10⁻⁹ cm/s. The K value from the field is too small to be accepted by TACO Plus software. Therefore, a conservative value of 5.37 x 10⁻⁸ cm/s is used in the calculations.

Datasheet B: Physical Soil Parameters for the RBCA Equations

Area(s)/Location(s) at the site, if applicable:

Predominant Soil Type (e.g., clay, sand, silty clay, etc.):

Surface (top 1 meter) or Subsurface (below 1 meter):

Site-specific values [i.e., field measurements (F =) or calculated values using the SSL equation (Sxx =)] are to be reported if they are used in developing the Tier 2 cleanup objectives. Acceptable procedures for obtaining these values are identified in Appendix C, Table F of TACO.

				Field	
Parameter	Soil Type	Default	Units	Measurement	Value
	:	Value		or Calculated	
	Subsurface				
	and/or				
	Subsurface soils				
ρb		1.5	kg/L	F =	
(Soil Bulk Density)	Gravel	2.0			
	Sand	1.8			
	Silt	1.6		Surface	1.70
	Clay	1.7		Subsurface	1.70
W	Surface and/or	0.1			
(Moisture Content)	Subsurface Soils		g_{water}/g_{soil}		
	Surface Soils	0.1	(unitless)		
	Subsurface Soils	0.2			
foc	Surface Soils	0.006	g/g	Surface	
(Organic Carbon Content)	Subsurface Soils	0.002	(unitless)	Subsurface	0.002
θ_{T}	Surface and/or				
(Total Soil Porosity)	Subsurface Soils	0.43			
	Gravel	0.25	cm ³ /cm ³ _{soil}		
	Sand	0.32	(unitless)		
	Silt	0.40		Surface	0.00
	Clay	0.36		Subsurface	0.36

Datasheet B: Physical Soil Parameters for the RBCA Equation (Continued)

Parameter	Soil Type	Default Value	Units	Field Measurement or Calculated	Value
θ_{as}	Surface Soils	0.28			
(Air-filled Soil Porosity)	Subsurface Soils	0.13			
	Gravel	0.05	cm ³ _{air} /cm ³ _{soil}		
	Sand	0.14	(unitless)		
	Silt	0.24		Surface	0.00
	Clay	0.19		Subsurface	0.19
$\theta_{ m ws}$	Surface Soils	0.15			
(Water-filled Soil	Subsurface Soils	0.30			
Porosity)	Gravel	0.20	cm ³ _{water} /cm ³ _{soil}	MAN AND AND AND AND AND AND AND AND AND A	
	Sand	0.18	(unitless)		
	Silt	0.16		Surface	0.00
	Clay	0.17		Subsurface	0.17

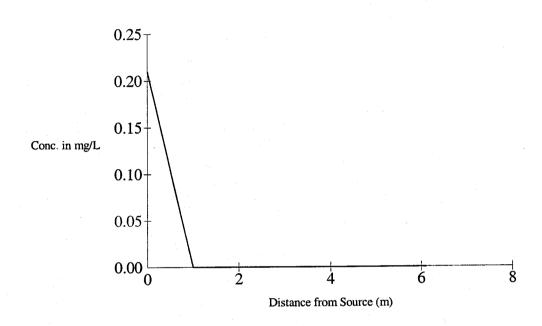
CALCULATIONS FOR CONCENTRATIONS AT THE NORTH BRANCH OF THE CHICAGO RIVER

MW01-001

Peoples Gas - Former Willow Street Station

Calculated Ground Water Information

Benzene



Distance to Meet Ground Water Objectives

<u>Class II</u> <u>Class II</u>

Met Met

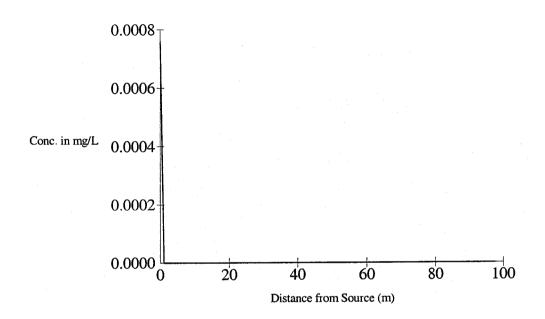
Distance from Source (m)	Calculated Concentration (mg/L)
0	2.10E-01
1	4.54E-29
2	1.63E-41
3	4.26E-51
4	3.60E-59
5	2.82E-66
6	1.07E-72
6.1	2.63E-73

MW05-001

Peoples Gas - Former Willow Street Station

Calculated Ground Water Information

Benzo(a)anthracene



Distance to Meet Ground Water Objectives

<u>Class II</u>

Met Met

Distance from Source (m)	Calculated Concentration (mg/L)
0	7.60E-04
1	3.47E-24
2	1.41E-33
3	8.04E-41
4	6.36 E-4 7
5	2.72E-52
6	3.85E-57
7	1.35 E- 61
8	9.61E-66
9	1.22E-69
10	2.53E-73
11	7.92 E-7 7
12	3.54E-80
13	2.17E-83

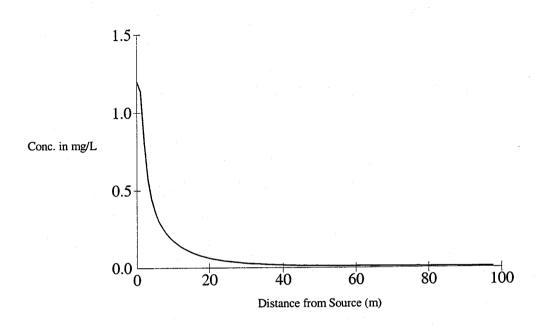
Calculated Ground	vv ater concentrations
Distance from Source (m)	Calculated Concentration (mg/L)
14	1.75E-86
15	1.82E-89
16	2.37E-92
17	3.78E-95
18	7.29E-98
19	1.67E-100
20	4.47E-103
21	1.39E-105
22	4.94E-108
23	2.00E-110
25 24	9.12E-113
25	4.65E-115
	2.63E-117
26	1.65E-119
27	
28	1.13E-121
29	8.51E-124
30	6.96E-126
31	6 16E-128
32	5.89E-130
33	6.05E-132
34	6.67E-134
35	7.86E-136
36	9.86E-138
37	1.32E-139
38	1.86E-141
39	2.78E-143
40	4.39E-145
41	7.31E-147
42	1.28E-148
43	2.35E-150
44	4.62E-152
45	9.50E-154
46	2.04E-155
47	4.56E-157
48	1.06E-158
49	2.57E-160
50	6.47E-162
51	1.69E-163
52	4.57E-165
53	1.28E-166
54 "	3.71E-168
55	1.11E-169
56	3.43E-171
57	1.09E-172
58	3.59E-174
59	1.22E-175
60	4.23E-177
61	1.52E-178
62	5.58E-180
63	2.11E-181
64	8.19E-183
65	3.26E-184
66	1.33E-185
67	5.56E-187
68	2.38E-188
	1.04E-189
69	
70	4.67E-191
71	2.14E-192
72	1.00E-193
73	4.79E-195
74	2.34E-196

Distance from Source (m)	Calculated Concentration (mg/L)
75	1 17E-197
76	5.93E-199
77	3.08E-200
78	1.63E-201
79	8.76E-203
80	4.81E-204
81	2.69E-205
82	1.53E-206
83	8.85E-208
84	5.21E-209
85	3.12E-210
86	1.90E-211
87	1.18E-212
88	7.41E-214
89	4.73E-215
90	3.07E-216
91	2.02E-217
92	1.35E-218
93	9.19E-220
94	6.33E-221
95	4.42E-222
96	3.13E-223
97	2.25E-224
97.5	6.06E-225

Peoples Gas - Former Willow Street Station

Calculated Ground Water Information

Copper



Distance to Meet Ground Water Objectives

 Class I
 Class II

 2.61 m.
 2.61 m.

Distance from Source (m)	Calculated Concentration (mg/L)
0	1.20E+00
1	1.14E+00
2	8.00E-01
3	5.78E-01
4	4.46E-01
5	3.62E-01
6	3.03E-01
7	2.60E-01
8	2.27E-01
9	1.99E-01
10	1.76E-01
11	1.56E-01
12	1.39E-01
13	1.24E-01

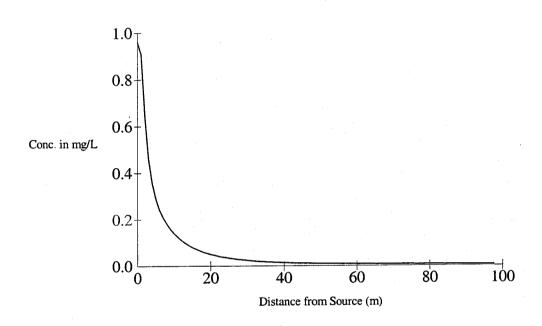
Distance from Source (m)	Calculated Concentration (mg/L)
14	1.12E-01
	1.01E-01
15	
16	9.12E-02
17	8.28E-02
18	7.54E-02
19	6.89E-02
20	6.32E-02
21	5.81E-02
22	5.36E-02
23	4.96E-02
24	4.59E-02
25	4.27E-02
26	3.98E-02
	3.71E-02
27	
28	3.47E-02
29	3.26E-02
30	3.06E-02
31	2.88E-02
32	2.71E-02
33	2.56E-02
34	2.42E-02
35	2.29E-02
36	2.17E-02
37	2.06E-02
38	1.96E-02
39	1.86E-02
	1.77E-02
40	
41	1.69E-02
42	1.62E-02
43	1.55E-02
44	1.51E-02
45	1.48E-02
46	1.45E-02
47	1.42E-02
48	1.39E-02
49	1.36E-02
50	1.33E-02
51	1.31E-02
52	1.28E-02
53	1.26E-02
54	1.23E-02
55	1.21E-02
56	1.19E-02
	1.17E-02
57	1.17E-02 1.15E-02
58	
59	1.13E-02
60	1.11E-02
61	1.09E-02
62	1.07E-02
63	1.06E-02
64	1.04E-02
65	1.02E-02
66	1.01E-02
67	9.94E-03
68	9.80E-03
69	9.65E-03
	9.52E-03
70 71	9.38E-03
71 72	
72	9.25E-03
73	9.13E-03
74	9.00E-03

Distance from Source (m)	Calculated Concentration (mg/L)
75	8.88E-03
76	8.76E-03
77	8.65E-03
78	8.54E-03
79	8.43E-03
80	8.33E-03
81	8.22E-03
82	8.12E-03
83	8.03E-03
84	7.93E-03
85	7.84E-03
86	7.75E-03
87	7.66E-03
88	7.57E-03
89	7.48E-03
90	7.40E-03
91	7.32E-03
92	7.24E-03
93	7.16E-03
94	7.09E-03
95	7.01E-03
96	6.94E-03
97	6.87E-03
97.5	6.83E-03

Peoples Gas - Former Willow Street Station

Calculated Ground Water Information

Lead



Distance to Meet Ground Water Objectives

 Class I
 Class II

 71.05 m.
 12.96 m.

Distance from Source (m)	Calculated Concentration (mg/L)
0	9.60E-01
1	9.09E-01
2	6.40E-01
3	4.62E-01
4	3.57E-01
5	2.89E-01
6	2.43E-01
7	2.08E-01
8	1.81E-01
9	1.59E-01
10	1.41E-01
11	1.25E-01
12	1.11E-01
13	9.96E-02

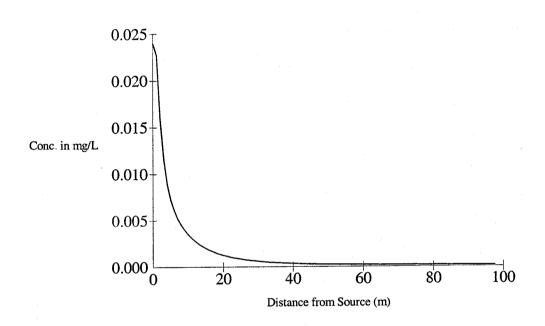
Calculated Ground	Water Concentrations
Distance from Source (m)	Calculated Concentration (mg/L)
14	8.94E-02
15	8.06E-02
16	7.29E-02
17	6.62E-02
18	6.03E-02
19	5.51E-02
20	5.06E-02
21	4.65E-02
22	4.29E-02
23	3.96E-02
24	3.68 E-02
25	3.42E-02
26	3.18E-02
27	2.97E-02
28	2.78E-02
29	2.60E-02
30	2.45E-02
31	2.30E-02
32	2.17E-02
33	2.05E-02
34	1.93E-02
35	1.83E-02
36	1.74E-02
37	1.65E-02
38	1.57E-02
39	1.49E-02 1.42E-02
40	1.42E-02 1.35E-02
41	1.29E-02
42 43	1.24E-02
43	1.21E-02
45	1.18E-02
46	1.16E-02
47	1.13E-02
48	1.11E-02
49	1.09E-02
50	1.07E-02
51	1.04E-02
52	1.02E-02
53	1.01E-02
54	9.87E-03
55	9.69E-03
56	9.52E-03
57	9.35E-03
58	9.19E-03
59	9.03E-03
60	8.88E-03
61	8.74E-03
62	8.59E-03
63	8.46E-03
64	8.33E-03
65	8.20E-03
66	8.07E-03
67	7.95E-03
68	7.84E-03
69	7.72E-03
70 71	7.61E-03 7.51E-03
71 72	7.31E-03 7.40E-03
72 73	7.30E-03
74	7.20E-03
· /+	,.202 03

Distance from Source (m)	Calculated Concentration (mg/L)
75	7.11E-03
76	7.01E-03
77	6.92E-03
78	6.83E-03
79	6.75E-03
80	6.66E-03
81	6.58E-03
82	6.50E-03
83	6 42E-03
84	6.34E-03
85	6.27E-03
86	6.20E-03
87	6.13E-03
88	6.06E-03
89	5.99E-03
90	5 92E-03
91	5.86E-03
92	5.79E-03
93	5.73E-03
94	5.67E-03
95	5.61E-03
96	5.55E-03
97	5.49E-03
97.5	5.47E-03

Peoples Gas - Former Willow Street Station

Calculated Ground Water Information

Thallium



Distance to Meet Ground Water Objectives

Class I	Class II
15.08 m.	1.40 m.

Distance from Source (m)	Calculated Concentration (mg/L)
0	2.40E-02
1	2.27E-02
2	1.60E-02
3	1.16E-02
4	8.92E-03
5	7.23E-03
6	6.07E-03
7	5.21E-03
8	4.53E-03
9	3.98E-03
10	3.52E-03
11	3.12E-03
12	2.78E-03
13	2.49E-03

Calculated Ground	TV dies Concentrations
Distance from Source (m)	Calculated Concentration (mg/L)
14	2.24E-03
15	2.02E-03
16	1.82E-03
17	1.66E-03
18	1.51E-03
19	1.38E-03
	1.26 E-0 3
20	1 16E-03
21	1.07E-03
22	
23	9.91E-04
24	9.19E-04
25	8.54E-04
26	7.95E-04
27	7.43E-04
28	6.95E-04
29	6.51 E-0 4
30	6.11 E-04
31	5.75E-04
32	5.42E-04
33	5.12E-04
34	4.84E-04
35	4.58E-04
36	4.34E-04
37	4.12E-04
38	3.91E-04
39	3.72E-04
40	3.55E-04
41	3.38E-04
42	3.23E-04
43	3.10E-04
44	3.03E-04
45	2.96E-04
46	2.90E-04
47	2.83E-04
48	2.78E-04
49	2.72E-04
50	2.66E-04
51	2.61E-04
52	2.56E-04
53	2.51E-04
	2.47E-04
54	2.42E-04
55	2.38E-04
56 57	
57 50	2.34E-04 2.30E-04
58	
59	2.26E-04
60	2.22E-04
61	2.18E-04
62	2.15E-04
63	2.11E-04
64	2.08E-04
65	2.05E-04
66	2.02E-04
67	1.99E-04
68	1.96E-04
69	1.93E-04
70	1.90E-04
71	1.88E-04
72	1.85E-04
73	1.83E-04
74	1.80E-04

Distance from Source (m)	Calculated Concentration (mg/L)
75	1.78E-04
76	1.75E-04
77	1.73E-04
78	1.71E-04
79	1.69E-04
80	1.67E-04
81	1.64E-04
82	1.62E-04
83	1.61E-04
84	1.59E-04
85	1.57E-04
86	1.55E-04
87	1.53E-04
88	1.51E-04
89	1.50E-04
90	1.48E-04
91	1.46E-04
92	1.45E-04
93	1.43E-04
94	1 42E-04
95	1.40E-04
96	1.39E-04
97	1-37E-04
97.5	1.37E-04

APPENDIX H
TIER 3 RISK EVALUATION
THE FORMER WILLOW STREET STATION
MANUFACTURED GAS PLANT SITE,
1640 NORTH KINGSBURY PORTION

TIER 3 RISK EVALUATION

for

THE FORMER WILLOW STREET STATION MANUFACTURED GAS PLANT SITE, 1640 NORTH KINGSBURY STREET CHICAGO, ILLINOIS

Prepared for

THE PEOPLES GAS LIGHT and COKE COMPANY

November 2005

PROJECT NO. 32088

Burns & McDonnell Engineering Company, Inc. 1431 Opus Place, Suite 400 Downers Grove, Illinois 60515-1164 630-724-3200

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1.0 INTRODUCTION

An Illinois Tiered Approach to Corrective Action Objectives (TACO) Tier 3 risk-based evaluation was performed for the Peoples Gas Light and Coke Company (Peoples Gas) on the 1640 North Kingsbury Portion of the Former Willow Street Station Manufactured Gas Plant (MGP) site in Chicago, Illinois, hereinafter referred to as the "Site." The Site is currently owned by GI North Property, LLC and is occupied by General Iron, Inc. for use as a laydown area for unprepared steel.

The Tier 3 evaluation was performed for future resident, utility worker and construction worker receptors at the Site following removal of soil that exceeded the remediation objectives. The risk assessment (RA) excludes the portion of the Site in the area of the 30-foot setback from the bank of the North Branch of the Chicago River. Remedial activities will include removal of all surface soil from ground surface to 3 feet below ground surface (bgs) across the site, along with removal of subsurface soil in impacted areas and source material. This evaluation was developed from subsurface soil data from site investigation soil sampling conducted in February 2002. The evaluation is limited to exposure to soil through the soil ingestion, soil dermal contact, and soil inhalation exposure pathways.

This Tier 3 risk-based evaluation was conducted using the formal risk assessment approach found in the United States Environmental Protection Agency's (USEPA) *Risk Assessment Guidance for Superfund (RAGS), Volume 1, Human Health Evaluation Manual (Part A)* (USEPA 1989). However, the sample data sets used to conduct this Tier 3 evaluation were limited since they exclude soil samples collected in soil to be removed during remediation.

The purpose of this submittal is to obtain Illinois EPA approval of scenarios, human exposure factors (both default values and assumptions), and toxicity values used. These scenarios and RA variables will be used to conduct a formal RA to be included in the remedial action completion report (RACR). The RACR RA will evaluate soil that remains on-site after remediation as represented by site investigation soil samples and confirmation samples collected during the remediation activities. These data sets will be representative of conditions across the entire Site outside of the river setback area; therefore, the RACR RA will fully evaluate risk to resident, utility worker and construction worker receptors.

The exposure point concentrations (EPCs) developed for chemicals of potential concern (COPCs) for the resident receptor developed in this Tier 3 risk evaluation will be used as Tier 3 soil screening values for confirmation sampling to be conducted during remediation.

Because the Tier 3 evaluation was conducted using the USEPA RAGS Part A approach, the following text is a description of all the steps taken to conduct a formal RA using the limited site investigation data sets.

An RA is a multi-step process consisting of the following tasks:

- Data evaluation;
- Exposure assessment;
- Toxicity assessment;
- Risk characterization; and
- Uncertainty analysis.

Data evaluation includes the selection of chemicals of potential concern (COPCs) that will be evaluated in the RA. Factors used to select COPCs include, but are not limited to, data quality, frequency of detection and the presence of COPCs in background soil studies. Exposure assessment involves characterizing the onsite media with respect to COPCs; identifying populations potentially exposed to COPCs; identifying exposure pathways; calculating representative concentrations and human intakes; and estimating the magnitude, frequency and duration of exposure. Toxicity assessment identifies types of adverse health effects associated with chemical exposures, relationships between the magnitude of exposure and adverse effects, and related uncertainties. Risk characterization estimates health risks associated with exposure to COPCs based on toxicity and exposure assessment information. Uncertainty analysis is a qualitative and, where possible, quantitative description of the assumptions and limitations inherent in each step of the RA.

Although these steps are presented sequentially, the RA process is highly iterative. Information developed in each step of the RA is useful in subsequent steps and provides feedback to preceding steps. For example, concentration data from exposure assessment may be used during data evaluation to select COPCs. Toxicity profiles developed in the toxicity assessment may provide important qualitative information for use in risk characterization or uncertainty analysis.

This RA complies with Illinois EPA guidance for risk assessments, the U.S. Environmental Protection Agency (USEPA) RAGS (USEPA 1989), and supplemental USEPA guidance as referenced throughout the text. This RA has seven sections:

- Section 1.0–Introduction.
- Section 2.0–Data Evaluation.
- Section 3.0–Exposure Assessment.
- Section 4.0–Toxicity Assessment.
- Section 5.0–Scenario Evaluation.
- Section 6.0–Risk Assessment Summary.
- Section 7.0–References.

* * * * *

2.0 DATA EVALUATION

Data evaluation is the process of selecting COPCs and developing a set of data used specifically for the RA, based on issues such as data quality, frequency of detection and presence of COPCs in background soil studies. This process includes the following steps:

- Gather data from the study area investigation(s);
- Evaluate analytical methods used;
- Evaluate quality of data with respect to laboratory reporting limits, qualifiers and blanks; and
- Develop a set of data for RA use.

Data evaluation objectives are used to identify a set of chemicals likely to be site-related and to evaluate whether or not reported concentrations are of acceptable quality for use in this quantitative RA. Data evaluated in this RA includes analysis from site investigation soil samples that were collected in February 2002. Soil samples were analyzed for Target Compound List (TCL), volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs) including polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), priority pollutant metals and total cyanide. Analytical results from samples collected by Burns & McDonnell were validated using the USEPA Contract Laboratory Program guidelines for data review (USEPA 1999 and 2004d). Data were determined to be generally acceptable for use in this RA.

Four exposure scenarios were determined as described in Section 3.0 and corresponding data sets were developed for data evaluation. All surface soil from 0 to 3 feet below ground surface (bgs) will be removed from the site during remedial activities and replaced with imported clean fill. Table 1 presents the analytical results for the soil samples collected at depths of 3 to 10 feet bgs across the site, excluding the setback area, that were selected for the post-remediation resident 1 and utility worker scenarios. Table 2 presents the analytical results for the soil samples collected at depths of 3 to vertical extent of COPCs in soil, which is at 17 feet bgs, that were selected for the post-remediation resident 2 and construction worker scenarios. Figures 1 and 2 present the RA soil sample location maps for the two data sets.

The following steps were taken to generate the COPC data sets for the four scenarios:

- No sample results were eliminated based on a comparison to the Illinois TACO Tier 1 screening levels. This allowed for evaluation of similar acting chemicals;
- Analytes that were non-detect in all samples were eliminated from further consideration as shown in Tables 3 and 4:
- Screening for frequency of occurrence was conducted. Compounds and analytes with an occurrence of detection of less than 5% were excluded from the evaluation (USEPA 1989); and
- Inorganic analyte concentrations were compared to metropolitan statistical area (MSA) background concentrations (35 IAC 742, Appendix A, Table G). Barium and zinc were

eliminated from both COPC data sets based on this background comparison. Cadmium was also eliminated from the post-remediation resident 1 and utility worker data set.

Table 3 presents a summary of occurrence, distribution and selection of COPCs for the post-remediation resident 1 and utility worker scenarios. Table 4 presents a summary of occurrence, distribution and selection of COPCs for the post-remediation resident 2 and construction worker scenarios.

After generating each COPC list, compounds and analytes flagged non-detect "U" were assigned a concentration equal to one half of the laboratory reporting limit for further statistical evaluation of data for residential risk. Tables 5 and 6 present the RA data sets for the post-remediation resident 1 and 2 scenarios, respectively. Maximum detected concentrations of COPCs are used for the post-remediation utility worker and for construction worker scenarios. COPCs with maximum detected concentrations for these two scenarios are presented in Tables 11 and 12, respectively.

* * * * *

3.0 EXPOSURE ASSESSMENT

The objective of the exposure assessment is to estimate the type and magnitude of human exposure to COPCs present in the Site soil. This section characterizes local land and water uses and identifies pathways through which COPCs may be transported from the Site. Based on this information, potential receptors and exposure routes are identified and exposure scenarios are developed.

The exposure assessment includes the following steps:

- Characterization of exposure setting;
- Identification of exposure pathway;
- Quantification of exposure; and
- Uncertainty evaluation.

3.1 CHARACTERIZATION OF EXPOSURE SETTING

The first step in the exposure assessment is to characterize the Site with respect to its physical characteristics and to identify the human populations of concern on and near the Site. This step results in a qualitative evaluation of the Site and surrounding populations with respect to those characteristics that influence exposure.

3.1.1 Land Use

The Site is located at the intersection of Willow Street and North Kingsbury Street in Section 32, Township 40 North, Range 14 East in the City of Chicago, Cook County, Illinois. The former Willow Street Station manufactured gas plant was approximately 5.5 acres in size and was located on three parcels of land. One parcel of the former Willow Street Station was located east of Kingsbury Street and the other two parcels were located west of Kingsbury Street adjacent to the North Branch of the Chicago River. The Site is located primarily on the western portion of the former Willow Street Station. The Site occupies approximately 3.4 acres and is bounded to the north and south by industrial/commercial properties (including Demco Metals, Inc. to the north and a storage yard to the south); to the east by the Chicago, Milwaukee & St. Paul Railroad and Kingsbury Street beyond which is a Commonwealth Edison transformer station, a Peoples Gas regulator station and commercial properties; and to the west by the North Branch of the Chicago River. The Site address is 1640 North Kingsbury, Chicago, Illinois. The Site is currently owned by GI North Property, LLC and is occupied by General Iron (GI) for use as a laydown area for unprepared steel. The site is currently zoned industrial/commercial. Future use of the Site and surrounding property is uncertain based on trends of development in the area.

3.1.2 Water Use

The City of Chicago supplies drinking water to the Site and surrounding areas from Lake Michigan, and an ordinance prohibits the installation of groundwater wells for potable water production.

3.2 IDENTIFICATION OF EXPOSURE PATHWAYS

The second step in exposure assessment is to identify potential human exposure pathways. An exposure pathway describes mechanisms by which selected populations may be exposed to COPCs. An exposure pathway analysis links sources, locations and types of environmental releases with population locations and activity patterns to determine significant pathways of human exposure.

For a potential risk to exist, the exposure pathway for a media must be complete. A complete exposure pathway has four elements:

- Source and mechanism of chemical release;
- Retention or transport medium (e.g., air, water and soil);
- Potential human contact point with impacted medium (exposure point); and
- Exposure route (e.g., ingestion, inhalation or dermal contact) at the exposure point.

Potential risk associated with some media is limited or nonexistent because exposure pathways are incomplete. Media are discussed in terms of the exposure potential for various populations.

3.2.1 Source and Mechanism of Chemical Release

The 1640 North Kingsbury Street portion of the Former Willow Street Station manufactured gas plant was used as a storage facility for manufactured gas and natural gas. The facility was active as a gas storage facility from its construction in 1895 until the mid-1900s. COPCs associated with manufactured gas were found as residuals in Site soil during site investigations conducted by Burns & McDonnell in 2002 and 2004.

3.2.2 Transport of Chemicals to Potential Receptors

COPCs may be transported to individuals at an industrial property from soils by direct skin contact, soil ingestion, inhalation of fugitive dust and inhalation of chemical vapors released from the soil.

Current and future land use of the Site limit potential receptors to future residents, utility workers and construction workers. Trespassers are excluded because the Site is enclosed with a fence.

Excavation during possible future development within the Site could cause subsurface soil to be redistributed to the surface. Therefore, for the post-remediation resident 1 and 2 scenarios, possible contact with soil currently located from the surface to 10 feet bgs and from surface to the vertical extent of COPCs in the soil (17 feet bgs) was considered, respectively. Utility workers were assumed to have potential exposure to soil to a depth of 10 feet bgs during utility repair or installation excavation. Construction workers were assumed to have potential exposure to soil to a depth of the vertical extent of COPCs during construction excavation.

3.2.3 Exposure Scenarios

This Tier 3 RA evaluates the resident, utility worker and construction worker receptors. The following four scenarios were developed:

- Post-Remediation Resident 1 (evaluates COPCs in soil from 3 feet to 10 feet bgs)
 - Incidental ingestion of soil.
 - Dermal contact with soil.
 - Inhalation of fugitive dust from soil.
 - Inhalation of chemical vapors released from soil.
- Post-Remediation Resident 2 (evaluates COPCs in soil from 3 feet to extent of COPCs)
 - Incidental ingestion of soil.
 - Dermal contact with soil.
 - Inhalation of fugitive dust from soil.
 - Inhalation of chemical vapors released from soil.
- Post-Remediation Utility Worker (evaluates COPCs in soil from 3 feet to 10 feet bgs)
 - Incidental ingestion of soil.
 - Dermal contact with soil.
 - Inhalation of fugitive dust from soil.
 - Inhalation of chemical vapors released from subsurface soil during repair or installation of subsurface utility lines.
- Post-Remediation Construction Worker (evaluates COPCs in soil from 3 feet to extent of COPCs)
 - Incidental ingestion of soil.
 - Dermal contact with soil.
 - Inhalation of fugitive dust from soil.
 - Inhalation of chemical vapors released from subsurface soil during construction activities.

3.3 QUANTIFICATION OF EXPOSURE

The third step in exposure assessment is to quantify the magnitude, frequency and duration of exposure for populations and exposure pathways. This step is often conducted in two stages: exposure concentrations are estimated; then, pathway-specific intakes are quantified. This section discusses only exposure concentrations. Section 5.0 addresses pathway-specific intakes.

3.3.1 Chemical Concentrations in Soil

3.3.1.1 Resident Scenarios

For the resident scenarios, either a 95% upper confidence limit (95 UCL) estimate of the mean, or the maximum concentration, whichever is least, was used as the reasonable maximum exposure (RME) concentration (USEPA 1992). The RME is intended to evaluate risk for the highest exposure that could reasonably be expected to occur at a site over time. The 95 UCL provides a conservative estimate of the mean concentration. The 95 UCL calculations vary according to the distribution of the sample data set. All statistical calculations were performed using ProUCL software, version 3.0 (USEPA 2004a). Results

from the W-Test (a statistical distribution test developed by Shapiro and Wilk [1965] for less than 50 samples) indicate that the data sets for all COPCs for the post-remediation resident 1 and resident 2 were normal, lognormal, gamma or non-parametric as shown in Tables 7 and 8, respectively.

The 95 UCL of each compound in the sample data set was calculated by ProUCL using one of several different methods. The best method of calculation for each data set was recommended by the program, and that recommendation is included in Tables 7 and 8. The detailed methodology of each method is explained in the ProUCL User's Guide (USEPA 2004a).

Because of the uncertainty associated with any estimate of exposure concentration, either the 95 UCL or the maximum concentration, whichever is least, was used for both the RME and central tendency (CT) concentrations (USEPA 1993). The CT is intended to evaluate risk for an average exposure as a comparison to the RME. Since the same exposure concentration was used for both the RME and the CT, differences between the RME and CT evaluations lie in the pathway-specific intakes discussed in Section 5.0. Tables 9 and 10 present the RME and CT exposure point concentrations (EPCs) for the post-remediation resident 1 and 2 scenarios, respectively.

The 95 UCL for each inorganic analyte was compared to the TACO MSA background concentration. Any inorganic analyte with a 95 UCL concentration less than the MSA background concentration may be eliminated from further consideration in the RA. This screening resulted in the elimination of arsenic and lead from the post-remediation resident 1 scenario and arsenic, cadmium and lead from the post-remediation resident 2 scenario.

3.3.1.2 Utility Worker and Construction Worker Scenarios

The post-remediation utility worker and construction worker are potentially exposed to soil on the Site at locations where the maximum detected concentrations of COPCs occur. In accordance with TACO guidelines (35 IAC 742.225), no averaging of soil sample results was conducted for COPCs for the post-remediation utility worker and construction worker scenarios. The maximum detected concentration of each COPC was used as the EPC in calculations used to characterize risk for both RME and CT exposures. Tables 11 and 12 present the RME and CT EPCs for the post-remediation utility worker and construction worker scenarios, respectively.

3.3.2 Modeled Chemical Concentrations in Air

This section presents the equations and assumptions used in the vapor transport modeling from soil to air used in the post-remediation resident 1, resident 2, utility worker and construction worker scenarios. The equations for vapor transport modeling presented in the USEPA *Soil Screening Guidance: User's Guide* (USEPA 1996) and USEPA *Supplemental Guidance for Developing Soil Screening Levels for Superfund* Sites (USEPA 2002a) were used to derive soil-to-air volatilization factors (VFs) for the various scenarios. The equations and variables used to calculate vapor emission rates and soil-to-air VFs are discussed in

the following subsections. Tables 13 and 14 present the calculations and resultant values for vapor emission rates and soil-to-air VFs in outdoor air for the post-remediation resident 1 and 2 scenarios. Tables 15 and 16 present the calculations and resultant values for vapor emission rates and soil-to-air VFs in outdoor air for the post-remediation utility worker and construction worker scenarios.

3.3.2.1 Vapor Emissions Rate to the Surface

The vapor emissions rate to the surface is provided by the apparent diffusivity D_a. The equation used to calculate this value uses soil physical properties such as dry bulk density, soil particle density, soil porosity and organic carbon content, as well as chemical-specific parameters such as organic partition coefficient, standard diffusivities in air and water and Henry's Law constant. In this equation, air-filled soil porosity (as determined by water-filled soil porosity or soil moisture content) is the most significant soil parameter affecting the final steady-state flux of volatile contaminants from soil (USEPA 1980). Soil physical properties used in the calculations for resident 1 and resident 2 were default values from Table B, Appendix C of TACO (35 IAC Part 742) or derivations from these values. Soil physical properties used in the calculations for utility worker and construction worker were also TACO default values or derivatives. However, surface values were used because the VF model for construction worker from the *Supplemental Guidance for Developing Soil Screening Levels for Superfund* Sites (USEPA 2002) assumes that all soil impact is located at the surface of the soil.

3.3.2.2 Vapor Concentration in Outdoor Air

The resultant vapor emission rates were entered into a soil-to-air VF formula subsequently used to estimate vapor concentrations in ambient air from soil COPCs. Per the USEPA *Soil Screening Guidance: Users Guide* (1996), a simplified VF equation developed by Jury et al. (1984) for evaluation of resident receptors replaces the Hwang and Falco (1986) model used as the basis for RAGS HHEM, Part B. The VF defines the relationship between the concentration of the contaminant in soil and the flux of the volatized contaminant to air. An infinite contaminant source is assumed, as is vapor phase diffusion as the only transport mechanism. In addition to the emissions rate the VF also incorporates a dispersion model (reduced to the term Q/C) that simulates the dispersion of contaminants in ambient air. This Q/C term replaces the box model for dispersion in RAGS HHEM, Part B. A site-specific Q/C (and hence a site-specific VF) is developed by placing the Site into a climatic zone and using an estimate of the Site's size. The variables used to calculate Q/C for this RA were those for Chicago, Illinois in Zone 7 presented in the USEPA *Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites* (USEPA 2002).

The calculation of the VF for utility worker and construction worker was performed using the USEPA (2002) construction worker equations. These equations are similar to the model equations for resident; however, regional climatic differences are not included in the Q/C equation. The constants used in the Q/C for construction worker were developed by USEPA using the USEPA's SCREEN 3 dispersion model for a hypothetical site under a wide range meteorological conditions.

3.4 UNCERTAINTIES ASSOCIATED WITH EXPOSURE ASSESSMENT

Estimated exposure levels to COPCs were generated with a number of uncertainties. Generally, these uncertainties are inherent in RAs, particularly because of the type and amount of data that can be collected in the short duration of sampling episodes. A summary of the most important uncertainties follows.

- Although current exposure levels are based on measured concentrations in the media of concern, these values are uncertain because of analytical variation. To account for this, the 95 UCL was used in dose calculations for the resident scenario.
- The use of maximum detected COPC concentrations for EPCs may overestimate the actual dose to which a utility worker and construction worker are exposed.
- COPC concentrations are assumed to remain static from the time of sampling, with no adjustment
 for dilution, biodegradation or volatilization. This assumption may result in an overestimation of
 the actual dose.
- Compounds flagged non-detect "U" were assigned a concentration equal to one-half of the laboratory reporting limit for 95 UCL calculations. This practice may result in an overestimation or underestimation of the actual concentration used in evaluation of the resident scenarios.
- During site investigation sampling, subsurface soil samples were typically selected for analysis
 where the highest level of COPCs were expected, based on visual observations and field
 screening measurements. This sampling practice may result in an overestimation of the actual
 exposure dose.
- The emission rate calculation for soil vapors does not take biodegradation, removal by leaching
 or adsorption of vapor to soil into account, resulting in possible overestimation of the exposure
 dose.
- The utility worker and construction worker VF calculations assume that all COPCs are present at maximum concentrations in surface soil. This may result in an overestimation of exposure to volatile chemical vapors.

* * * * *

4.0 TOXICITY ASSESSMENT

Toxicity assessment identifies potential adverse health effects associated with chemical exposures (hazard identification) and estimates the relationship between the magnitude of exposure and likelihood of adverse effects (dose-response evaluation). Dose-response relationships are derived using human, animal and/or supporting data. These relationships are then used to determine a toxicity value that can be used to estimate risk. The toxicity assessment is conducted separately for the noncarcinogenic and carcinogenic effects of COPCs because differences exist between the noncarcinogenic and carcinogenic dose-response variables. The magnitude of potential noncarcinogenic effects is evaluated using either an oral or dermal reference dose (RfD) or an inhalation reference concentration (RfC) value. Potential carcinogenic effects are quantified using a slope factor (SF) or an inhalation unit risk (UR). These toxicity values are compiled by the USEPA for individual COPCs for which dose-response data are available.

Illinois EPA recommends that the following hierarchy be used to identify toxicity values:

- 1. Integrated Risk Information System (IRIS);
- 2. USEPA Provisional Peer Reviewed Toxicity Values for Superfund (PPRTVs);
- 3. USEPA/National Center for Environmental Assessment (NCEA) provisional value; and
- 4. Health Effects Assessment Summary Tables (HEAST) values.

IRIS is available online at the USEPA web site (USEPA 2005). A formal process for selection and review of chemical data results in periodic updates to the system. Use of the PPRTV web site is restricted to USEPA users. USEPA/NCEA values are published by USEPA Region 3 in their Risk-Based Concentration (RBC) table, which is updated semi-annually with values that have been made available to them (USEPA 2004b). The HEAST tables were last published in 1997 and are not currently being updated (USEPA 1997b).

4.1 TOXICITY VALUES FOR NONCARCINOGENIC EFFECTS

Examples of noncarcinogenic health effects from exposure to toxic chemicals include liver and kidney damage, decreased fertility, birth defects and damage to the central nervous system. The human body has detoxification mechanisms that can convert toxic chemicals into nontoxic products and excrete them; however, these mechanisms have a limited ability to process toxins. An underlying assumption in risk calculations is that a threshold exists for initiation of noncarcinogenic effects. For calculating noncarcinogenic risk, the RfD or RfC is used to estimate this threshold. The USEPA defines the chronic RfD as "an estimate (with uncertainty spanning perhaps an order of magnitude or greater) of a daily exposure level for the human population, including sensitive subpopulations, that is likely to be without an appreciable risk of deleterious effects during a lifetime" (USEPA 1989). Similarly a chronic RfC is defined as "an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous

inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime" (USEPA 2005).

A chemical's RfD is determined based on the relationship between the dose of the noncarcinogen and the frequency of adverse health effects observed in experimental animals or humans (USEPA 1989). RfDs are obtained by dividing the level at which no adverse effect is observed by uncertainty factors to account for study-specific uncertainties, such as sensitive subpopulations, extrapolation of animal data to humans, and use of short-term exposure data. A chemical's inhalation RfC is analogous to the oral RfD and is also based on the assumption that thresholds exist for certain toxic effects. The inhalation RfC considers toxic effects for both point-of-entry and effects peripheral to the respiratory system.

Subchronic RfDs and RfCs are used to characterize potential noncarcinogenic effects for short-term exposure. Utility workers and construction workers are exposed for short periods of time, usually of a year or less; therefore, subchronic RfDs and RfCs were used to calculate risks, if they were available. When RfDs or RfCs were not available for a subchronic exposure period, the chronic RfD or RfC was used for risk calculations. Residents are assumed to be exposed for periods of nine years or more; therefore, chronic RfDs or RfCs were used to calculate risks, if they were available.

RfDs may vary with exposure route; therefore, they are developed for specific exposure routes (ingestion and, in some cases, inhalation). RfDs are expressed in units of milligram (mg) of chemical exposure per kilogram (kg) body weight of the exposed individual per day (mg/kg-day). Subchronic or chronic oral RfDs for the ingestion exposure route are available for most volatile organic and inorganic COPCs as well as some semivolatile organic COPCs. RfDs for dermal absorption are estimated using the oral RfD. To obtain the dermal RfD, the oral RfD is multiplied by a chemical-specific gastrointestinal absorption efficiency when the oral RfD is derived from an administered dose rather than an absorbed dose. Per RAGS Part E, *Supplemental Guidance for Dermal Risk Assessment* (USEPA 2004c), if a chemical-specific gastrointestinal absorption efficiency is not available for an inorganic COPC, a gastrointestinal absorption efficiency of 100% is assumed. RAGS Part E also recommends a gastrointestinal absorption efficiency of 100% for PAHs. The RAGS Part E recommendation for VOCs is to evaluate them through inhalation exposure routes rather than a dermal exposure route, since they will volatilize from soil on skin before they can be absorbed. Therefore, acetone, benzene, 2-butanone, ethylbenzene and o-xylene are excluded from the dermal risk assessment. As a conservative measure, naphthalene is evaluated in both dermal and inhalation exposure routes.

Non-carcinogenic toxicity values for the inhalation exposure pathway are calculated as RfCs in milligrams per cubic meter (mg/m^3). Inhalation RfCs are available for benzene, 2-butanone, ethylbenzene, o-xylene, naphthalene, beryllium, chromium and mercury. RfCs with systemic effects are converted to inhalation RfDs by assuming an inhalation rate (IR) of 20 m^3 /day and a body weight (BW) of 70 kg, where: RfD (mg/kg-day) = RfC (mg/m^3) x (20 m^3 /day ÷ 70 kg). Benzene, 2-butanone, ethylbenzene, o-xylene and mercury have systemic effects and the RfCs were converted to RfDs. The

toxic effects of naphthalene, beryllium and chromium, are point-of-entry effects; therefore, the RfCs for these three COPCs were not converted to RfDs.

Systemic effects for benzene, 2-butanone, ethylbenzene, o-xylene and mercury and are supported by the following studies used to develop RfC values. The benzene RfC is based on critical effects from studies of decreased lymphocyte count in humans (Rothman et al., 1996). The 2-butanone RfC is based on developmental effects including extra ribs and misaligned sternebrae in fetuses, and decreased fetal weight (Deacon et al. 1981; Mast et al. 1989; Schwetz et al. 1991.) The ethylbenzene RfC is based on critical effects from studies of developmental effects (Andrew et al. 1981; Hardin et al. 1981). The o-xylene RfC is based on critical effects from studies of impaired motor coordination (Korsak et al., 1994). The mercury RfC is based on critical effects from studies of hand tremor, increases in memory disturbance and autonomic dysfunction (Fawer et al. 1983; Piikivi et al. 1989; Ngim et al. 1992; Liang et al. 1993). All toxicity studies are cited from IRIS (USEPA 2005). The RfCs for these compounds were converted to RfDs based on their systemic effects.

For COPCs where the RfD or RfC is not available, the corresponding exposure route was not evaluated for noncarcinogenic effects. Tables 17a and 18a present oral and dermal RfDs used for the post-remediation resident scenarios and the utility worker and construction worker scenarios, respectively. Tables 17b and 18b present inhalation RfDs and RfCs used for the post-remediation resident scenarios and utility worker and construction worker scenarios, respectively.

4.2 TOXICITY VALUES FOR CARCINOGENIC EFFECTS

SFs and URs are toxicity values used to estimate the excess probability of cancer in an exposed population. A SF represents the probability of a response per unit intake of a chemical over a lifetime and is given in risk per mg/kg/day. SFs are typically estimated by assuming a linear multi-stage model of the relationship between administered dose and observed cancer rate. This non-threshold theory assumes that even a small number of molecules (possibly even a single molecule) of a carcinogen may cause changes in a single cell that may lead to the onset of cancer. Though SFs are applied to long-term, low dose exposure scenarios, they are usually estimated from high dose, short-term animal studies. The SF generally represents the upper limit of a chemical's carcinogenic potency. The UR is the carcinogenic toxicity value used for the inhalation exposure route, and is the upper-bound excess lifetime cancer risk estimated to result from continuous exposure to a chemical at a concentration of microgram per cubic meter ($\mu g/m^3$) in air.

The USEPA classifies each chemical according to the weight-of-evidence system, which is based on the extent to which the chemical has been shown to be a carcinogen in humans, experimental animals or both. This system classifies potential carcinogens as Group A, B1, B2, C, D or E. Group A chemicals are classified as human carcinogens with sufficient evidence from epidemiologic studies to support a causal association between human exposure and cancer. Group B1 and B2 chemicals are classified as probable

human carcinogens. Group B1 applies to chemicals with limited evidence of carcinogenicity in humans from epidemiologic studies, and Group B2 applies to chemicals with inadequate evidence of carcinogenicity in humans, but sufficient evidence of carcinogenicity in animals. Group C applies to chemicals with limited evidence of carcinogenicity in animals. Group D is not classified because of inadequate evidence of carcinogenicity in animals and Group E applies to chemicals that show no evidence of carcinogenicity in humans, where at least two adequate animal tests or both epidemiologic and animal studies have been conducted.

Benzene and arsenic are the only compounds in this RA classified as Group A, human carcinogens with sufficient evidence from epidemiologic studies to support a causal association between human exposure and cancer for both ingestion and inhalation exposure routes. Hexavalent chromium is classified as Group A for the inhalation exposure route and Group D for the ingestion exposure route. The carcinogenic PAH compounds are classified as Group B2, probable human carcinogens with sufficient evidence of carcinogenicity in animals but inadequate evidence in humans. Naphthalene is classified as Group C, a possible human carcinogen.

Chemical-specific carcinogenic potency depends on its exposure pathway (ingestion, dermal absorption or inhalation Oral SFs are available for benzene, bis(2-ethylhexyl)phthalate, carbazole, carcinogenic PAHs and arsenic. In accordance with RAGS Part E, a gastrointestinal absorption efficiency of 100% is assumed for carcinogenic PAHs. Benzene will volatilize from skin before it is absorbed; therefore, benzene is evaluated in the inhalation exposure routes rather than the dermal exposure route (USEPA 2004c).

Carcinogenic effects for the inhalation exposure route are expressed in terms of UR in air. For systemic carcinogens, URs are converted to inhalation SFs by assuming an IR of 20 m³/day and a BW of 70 kg, where: SF (mg/kg-day) $^{-1}$ = UR (μ g/m³) $^{-1}$ x (70 kg \div 20 m³/day x 1000 μ g/mg). UR values should not be converted to SFs when the carcinogenic effect is at the point of entry only. Inhalation UR values are available for benzene, arsenic, beryllium, cadmium, and hexavalent chromium from IRIS. A USEPA/NCEA provisional UR value is available for benzo(a)pyrene, and URs for PAHs were derived using USEPA benzo(a)pyrene equivalency factors (USEPA 2004b). The UR for benzene was converted to the SF. The URs for all other carcinogenic COPCs, which are point-of-entry carcinogens, were used directly to calculate carcinogenic risk.

For COPCs that do not have a SF or inhalation UR, risk for the corresponding exposure route is not evaluated. Tables 17a and 18a present oral and dermal SFs used for the post-remediation resident scenarios and utility worker and construction worker scenarios, respectively. Tables 17b and 18b present inhalation URs and SFs used for the post-remediation resident scenarios and utility worker and construction worker scenarios, respectively.

4.3 UNCERTAINTIES RELATED TO TOXICITY ASSESSMENT

Estimations of the effects of contaminant exposure to human health are imprecise because of uncertainties in dose-response relationships. Toxicity information for COPCs is limited and corresponding degrees of uncertainty associated with calculated toxicity values vary.

The following uncertainty sources for toxicity values may overestimate or underestimate risks:

- Dose-response data from high dose experiments used to predict adverse health effects from exposure to low, site-related doses;
- Dose-response data from short-term exposure studies used to predict long-term adverse health effects;
- Dose-response data from experimental animal studies used to predict adverse health effects in humans; and
- Dose-response data from homogeneous experimental animal populations used to predict adverse effects in diverse human populations.

Most RfC and RfD values have uncertainty factors ranging from 100 to 1,000. The high uncertainty factor accounts for the uncertainty involved in extrapolating to low doses from high dose studies (USEPA 1989).

Carcinogenic SFs have two important sources of uncertainty: the dose-response curve is assumed to be linear and no threshold dose for cancer induction is assumed. Carcinogens may cause cancer by several different mechanisms. Several types of dose-response curves could result. Data are inadequate to support more detailed assumptions regarding dose response. Burmaster and Von Stackelberg (1988) found that uncertainties associated with carcinogenic SFs make the greatest contribution to the total uncertainty of a carcinogenic risk estimate.

Numerous uncertainties exist regarding carcinogenicity evidence based on animal studies. Animal studies often use high doses to test carcinogenic effects to provide more rapid results and decrease the number of animals needed; however, the high dose may cause cellular damage. When cellular damage occurs, natural repair mechanisms increase the overall rate of cell growth. The result is an increased rate of cancer due to increased cell growth rate and not the carcinogenic effects of the chemical. It is also assumed that all compounds that are carcinogenic in animals are also carcinogenic in humans. Group B2 classified contaminants produce considerable uncertainty in the carcinogenic risk estimates.

Carcinogenic and noncarcinogenic effects from dermal contact with soils are estimated by extrapolating an absorbed toxicity factor for those contaminants with oral toxicity values based on administered doses which could be extrapolated based on effect. A great deal of uncertainty exists regarding the absorption rates used for both dermal and oral exposure routes. The use of a 100% default gastrointestinal

absorption value for PAHs may cause an underestimation of noncarcinogenic risk and an overestimation of carcinogenic risk.

Some chemicals do not have enough quality toxicity testing to assign toxicity values. Therefore, risks may be underestimated in this RA due to the lack of these toxicity values.

* * * * *

5.0 SCENARIO EVALUATION

The following section discusses general procedures for exposure assessment and risk calculation and applies these procedures to the four scenarios. Results and uncertainties of risk calculations are then discussed by exposure scenario for both carcinogenic and noncarcinogenic cases.

5.1 SCENARIO EXPOSURE ASSESSMENT

The exposure assessment estimates the magnitude of potential human exposure to site-related COPCs for a given scenario through the following steps:

- Characterize exposure setting;
- Identify exposure pathways;
- Quantify exposure; and
- Discuss uncertainties related to exposure assessment.

The exposure setting is characterized by describing the environment to which each identified receptor is exposed. Pertinent exposure pathways are then identified based on the exposure setting. Quantifying exposure for populations and pathways of interest involves determining the exposure point concentrations (EPCs) and pathway-specific daily intakes (DIs). Tables 9, 10, 11 and 12 present the RME and CT EPCs as developed in Section 3.3 for the post-remediation resident 1, resident 2, utility worker and construction worker, respectively.

An average daily intake, DI (in mg chemical of interest per kg of body weight per day) is calculated using the following equation:

$$DI = (C \times HIF)$$

Where:

DI = Daily Intake (mg/kg-day).

C = Concentration (units are media-dependent).

HIF = Human Intake Factor (units are media-dependent).

and

$$HIF = \frac{(CR \times EF \times ED)}{BW \times AT}$$

Where:

CR = Contact Rate (units are media-dependent).

EF = Exposure Frequency (workdays/year).

ED = Exposure Duration (years).

BW = Body Weight (kg).

 $AT_n = Noncarcinogenic Averaging Time = ED (resident).$

 AT_n = Noncarcinogenic Averaging Time = 7-day week equivalent of EF (construction worker).

 AT_c = Carcinogenic Averaging Time = 70 years

The HIF for various soil exposure routes may incorporate additional variables such as fraction of soil ingested (oral exposure) or soil adherence to skin factors (dermal exposure). HIF for the inhalation exposure route omits BW and CR variables when RfCs or URs are used to calculate toxicity.

The DI is an average intake over a lifetime (70 years) for carcinogenic risk calculations and an average intake over the duration of exposure for noncarcinogenic risk estimates. Values for CR, EF and ED may vary for RME and CT. The values for the DI calculations and the rationale used in their selection are presented in the sections pertaining to each individual scenario. As discussed earlier, the RME is intended to evaluate risk for the highest exposure that could reasonably be expected to occur over time. The CT is intended to evaluate risk for an average exposure as a comparison to the RME.

5.2 SCENARIO RISK CHARACTERIZATION

The risk characterization process involves the estimation of human health risks from COPCs based on toxicity and exposure information. Risk characterization consists of the following steps:

- Evaluate noncarcinogenic risk;
- Evaluate carcinogenic risk; and
- Characterize uncertainties related to risk.

Noncarcinogenic and carcinogenic risks are estimated for each COPC and for each exposure pathway when toxicity data are available. The risk is found for both the noncarcinogenic and carcinogenic case for each exposure pathway by summing the risk associated with each COPC. The total risk for each scenario is then found by summing the risk estimated for each exposure pathway.

5.2.1 Noncarcinogenic Risk Values

Noncarcinogenic risks are expressed as a hazard quotient (HQ), which is the ratio of the estimated DI to the RfD or RfC. A HQ greater than 1 indicates that the estimated dose exceeds the RfD or RfC for the contaminant. It is not a statistical probability of the incidence or severity of an adverse health effect, but rather a simple numerical index to identify potential exposure problems (USEPA 1989). The HQ is calculated as follows:

$$HQ = (DI / RfD)$$
 or
= (DI / RfC)

Where:

HQ = Hazard Quotient (unitless).DI = Daily Intake (mg/kg-day).

RfD = Reference Dose (mg/kg-day).

RfC = Reference Concentration (mg/m^3).

Assuming the effect of exposure to numerous chemicals where no single chemical exceeds a threshold could result in an adverse health effect, the chemical-specific HQ values are summed to calculate the total hazard index (HI) for a given exposure pathway.

$$HI = HQ_1 + HQ_2 + \dots HQ_i$$

Where:

HI = Hazard Index (unitless).

 $HQ_i = Hazard Quotient of the jth chemical (unitless).$

A HI greater than 1 suggests that exposure to all COPCs collectively exceeds a generalized level of concern. The level of concern increases as the HI approaches and exceeds a value of 1. It should be noted, however, that the level of concern does not increase linearly as the HI approaches 1 because individual RfD and RfC values for various substances do not have equal accuracy or precision and are not based on the same severity of toxic effects. The HI may combine noncarcinogenic HQs of chemicals of interest that produce different toxicological effects (e.g., liver damage versus kidney damage) and combines RfDs and RfCs that exhibit varying levels of uncertainty. Therefore, the HI should be regarded as a general indicator of the degree of concern rather than a quantified estimator of potential health effects. When the initial HI calculated for a particular study area is greater than 1, noncarcinogenic risks can be evaluated in greater detail if that is justifiable for the specific situation.

5.2.2 Carcinogenic Risk Values

Carcinogenic risks are expressed as the excess (above background) probability that an individual will develop cancer during a lifetime if exposed to a chemical. Because the SF is often an upper 95 UCL of the slope of the dose-response curve, carcinogenic risk estimates based on SFs are generally upper-bound estimates. This value is calculated using the average DI over a lifetime and the SF for the COPC as follows:

```
Excess Risk = DI \times SF
```

Where:

DI = Daily Intake (mg/kg-day). SF = Slope Factor (mg/kg-day)⁻¹.

The following equation is used to calculate an inhalation carcinogenic risk using the UR and is also an upper-bound estimate of risk:

Excess Risk = DI x UR x
$$1000 \mu g/mg$$

Where:

DI = Daily intake (mg/kg-day). UR = Unit risk $(\mu g/m^3)^{-1}$.

Only lifetime average DIs are used in conjunction with SFs and URs to obtain excess lifetime cancer risk estimates because SFs and URs are formulated on the basis of average lifetime exposures.

The observed national background cancer risk (no exposure to site contaminants) is approximately 1 in 4. In the National Contingency Plan (NCP), set forth in Title 40 of the Code of Regulations, Part 300 (40 CFR Part 300), the USEPA set an excess cancer occurrence of 1 in 1 million (a risk of 1 x 10⁻⁶) as the point of departure for determining remediation goals for Superfund sites (40 CFR 300.430[e][2]). According to the Illinois EPA, a site with carcinogenic risks less than 1 x 10⁻⁶ generally should be considered a no-action site. For sites with a carcinogenic risk greater than 1 x 10⁻⁶, further site evaluation is required. For a site with a carcinogenic risk greater than 1 x 10⁻⁴, corrective action is normally required (Illinois EPA 1994).

5.3 POST-REMEDIATION RESIDENT 1 SCENARIO

In this section, the exposure assessment and risk characterization for the post-remediation resident 1 scenario is explained. The post-remediation resident 1 scenario evaluates the adult and child resident. Specific assumptions and values for the exposure scenario are discussed, followed by the noncarcinogenic and carcinogenic risk evaluation results.

5.3.1 Exposure Assessment

5.3.1.1 Characterization of Exposure Setting

This scenario evaluates potential exposure for post-remediation resident 1 within the Site. The top 3 feet of soil will be removed across the Site during remediation and replaced with imported clean fill. The post-remediation resident is assumed to be exposed to the COPCs in the soil redistributed to the surface from 3 feet down to 10 feet bgs. During outdoor activities, ingestion of and dermal contact with soil are likely to occur, as well as inhalation of airborne soil and dust and vapors volatilized from soil.

5.3.1.2 Identification of Exposure Pathway

The following pathways were identified for the post-remediation resident 1:

- Incidental ingestion of soil resulting from placing soil-impacted hands or objects in the mouth and also possibly from dust caught in the nose and throat being moved to the back of the mouth and swallowed. A child may directly ingest soil during outdoor activities.
- Dermal contact with soil resulting in the absorption of COPCs.
- Inhalation of airborne soil and dust, which results from breathing respirable particles of soil containing COPCs.
- Inhalation of VOC vapors released from soil.

5.3.1.3 Quantification of Exposure

Values used for HIFs were obtained from USEPA and Illinois EPA guidance (USEPA 1989, 1991, 1993, 1997a, 2004c and Illinois Administrative Code [IAC] 2002) and are summarized in Table 19a for an adult resident and Table 19b for a child resident. USEPA default exposure frequencies of 350 days per year for RME and CT were used based on the conservative assumption that a resident will be routinely exposed

throughout the year. Tables 20 through 27 present exposure concentrations and DIs for the above exposure pathways.

COPCs were evaluated for dermal exposure using RAGS Part E, Supplemental Guidance for Dermal Risk Assessment (USEPA 2004c).

5.3.1.4 Uncertainties Related to Exposure Assessment

The following exposure assessment uncertainties were identified:

- The post-remediation resident scenario evaluates exposure to Site soil. The user may not be
 exposed as frequently or with the magnitude assumed for this RA; therefore, exposure may be
 overestimated.
- Exact Site-specific data on human activity patterns are not available; therefore, assumed values for soil contact rates are uncertain. Values selected may be conservative or liberal, leading to an overestimation or underestimation of risk, respectively.
- Dermal uptake of soil COPCs is difficult to estimate. The uptake rate depends on both chemical-specific and Site soil characteristics. Absorption values used to estimate dermal uptake are highly uncertain, possibly leading to an underestimation or overestimation of dose.

5.3.2 Risk Characterization

5.3.2.1 Noncarcinogenic Risk Evaluation

Tables 20 through 27 present calculations of results of noncarcinogenic hazards for the post-remediation resident 1 scenario and Table 54 presents the combined HI values. The overall scenario noncarcinogenic HI is 0.04 for the RME and 0.02 for the CT, which are both below the generalized level of concern of 1 for noncarcinogenic effects.

5.3.2.2 Carcinogenic Risk Evaluation

Tables 20 through 27 present calculations of lifetime cancer risks for the post-remediation resident 1. Table 54 presents the combined carcinogenic risk values. The excess lifetime cancer risk is 8×10^{-6} for the RME and 1×10^{-6} for the CT. The RME cancer risk is above the Illinois EPA no-action level of 1×10^{-6} but falls within the concentration range of 1×10^{-6} and 1×10^{-4} where additional Site evaluation is required. The CT (i.e. additional evaluation) meets the Illinois EPA no-action level of 1×10^{-6} .

5.3.2.3 Uncertainties Related to Risk Evaluation

Uncertainty factors already presented in the preceding sections (exposure assessment and toxicity assessment) also contribute uncertainty to risk estimates for the following reasons:

- COPC exposure concentrations may be overestimated or underestimated because of the limited number of samples collected to represent Site soil.
- Assumed exposure values for the duration and rate of exposure may not represent actual values.
- Toxicity values are uncertain because of dose-response and extrapolation factors.

Carcinogenic and noncarcinogenic risks are each combined across COPCs. It is assumed that
chemical-specific risks are independent and additive; however, COPCs may interact to produce a
less than additive effect or a more than additive effect. Chemical interaction data are lacking for
most chemical mixtures. In the absence of this information, the standard approach is to assume
COPC additivity, which may result in an overestimation or underestimation of risk.

5.4 POST-REMEDIATION RESIDENT 2 SCENARIO

In this section, the exposure assessment and risk characterization for the post-remediation resident 2 scenario is explained. The post-remediation resident 2 scenario evaluates the adult and child resident. Specific assumptions and values for the exposure scenario are discussed, followed by the noncarcinogenic and carcinogenic risk evaluation results.

5.4.1 Exposure Assessment

5.4.1.1 Characterization of Exposure Setting

This scenario evaluates potential exposure for post-remediation resident 2 within the Site. The top 3 feet of soil will be removed across the Site during remediation and replaced with imported clean fill. The post-remediation resident is assumed to be exposed to the COPCs in the soil redistributed to the surface from 3 feet down to the vertical extent of COPCs (17 feet bgs). During outdoor activities, ingestion of and dermal contact with soil are likely to occur, as well as inhalation of airborne soil and dust and vapors volatilized from soil.

5.4.1.2 Identification of Exposure Pathway

The following pathways were identified for the post-remediation resident 2:

- Incidental ingestion of soil resulting from placing soil-impacted hands or objects in the mouth and also possibly from dust caught in the nose and throat being moved to the back of the mouth and swallowed. A child may directly ingest soil during outdoor activities.
- Dermal contact with soil resulting in the absorption of COPCs.
- Inhalation of airborne soil and dust, which results from breathing respirable particles of soil containing COPCs.
- Inhalation of VOC vapors released from soil.

5.4.1.3 Quantification of Exposure

Values used for HIFs were obtained from USEPA and Illinois EPA guidance (USEPA 1989, 1991, 1993, 1997a, 2004c and Illinois Administrative Code [IAC] 2002) and are summarized in Table 19a for an adult resident and Table 19b for a child resident. USEPA default exposure frequencies of 350 days per year for RME and CT were used based on the conservative assumption that a resident will be routinely exposed throughout the year. Tables 28 through 35 present exposure concentrations and DIs for the above exposure pathways.

COPCs were evaluated for dermal exposure using RAGS Part E, Supplemental Guidance for Dermal Risk Assessment (USEPA 2004c).

5.4.1.4 Uncertainties Related to Exposure Assessment

Uncertainties similar to those discussed for the post-remediation resident 1 (Section 5.3.1.4) also apply to the post-remediation resident 2 scenario.

5.4.2 Risk Characterization

5.4.2.1 Noncarcinogenic Risk Evaluation

Tables 28 through 35 present calculations of results of noncarcinogenic hazards for the post-remediation resident 2 scenario and Table 54 presents the combined HI values. The overall scenario noncarcinogenic HI is 0.04 for the RME and 0.02 for the CT, which are both below the generalized level of concern of 1 for noncarcinogenic effects.

5.4.2.2 Carcinogenic Risk Evaluation

Tables 28 through 35 present calculations of lifetime cancer risks for the post-remediation resident 2 and Table 54 presents the combined carcinogenic risk values. The excess lifetime cancer risk is 7×10^{-6} for the RME and 1×10^{-6} for the CT. The RME cancer risk is above the Illinois EPA no-action level of 1×10^{-6} but falls within the concentration range of 1×10^{-6} and 1×10^{-4} where additional Site evaluation is required. The CT (i.e. additional evaluation) meets the Illinois EPA no-action level of 1×10^{-6} .

5.4.2.3 Uncertainties Related to Risk Evaluation

Uncertainties similar to those discussed for the post-remediation resident 1 scenario (Section 5.3.2.3) also apply to the post-remediation resident 2 scenario.

5.5 POST-REMEDIATION UTILITY WORKER SCENARIO

In this section, the exposure assessment and risk characterization for the post-remediation utility worker scenario is explained. Specific assumptions and values for the exposure scenario are discussed, followed by the noncarcinogenic and carcinogenic risk evaluation results.

5.5.1 Exposure Assessment

5.5.1.1 Characterization of Exposure Setting

This scenario evaluates potential exposure for a post-remediation utility worker within the Site. The top 3 feet of soil will be removed across the Site during remediation and replaced with imported clean fill. The post-remediation utility worker is assumed to be exposed to COPCs in soil from 3 feet to a depth of 10 feet bgs. During underground utility repair or installation activities at the Site, ingestion of and dermal contact with soil are likely to occur, as well as inhalation of airborne soil and chemical vapors volatilized from soil.

5.5.1.2 Identification of Exposure Pathway

The following pathways were identified for the post-remediation utility worker:

- Incidental ingestion of soil resulting from placing soil-contaminated hands or objects in the mouth and possibly from dust caught in the nose and throat being moved to the back of the mouth and swallowed.
- Dermal contact with soil resulting in the absorption of COPCs.
- Inhalation of airborne soil and dust, which results from breathing respirable particles of soil containing COPCs.
- Inhalation of VOC vapors released from soil during utility repair or installation activities and disruption of the soil surface.

5.5.1.3 Quantification of Exposure

Most values used for the HIFs were obtained from the USEPA and Illinois EPA guidance (USEPA 1991, 1997a, 2002a, 2004c and IAC 2002) and are summarized in Table 36. An assumed exposure frequency of 20 days per year for the RME and 10 days per year for the CT was used based on anticipated utility repair or installation activities at the Site. Tables 37 through 44 present exposure concentrations and DIs for the above exposure pathways.

5.5.1.4 Uncertainties Related to Exposure Assessment

The following exposure assessment uncertainties were identified:

- The post-remediation utility worker scenario evaluates exposure to Site soil. The user may not be exposed as frequently or with the magnitude assumed for this RA; therefore, exposure may be overestimated.
- The post-remediation utility worker is assumed to be exposed to soil containing the maximum detected concentrations of COPCs, which may overestimate risk.
- Exact site-specific data on human activity patterns are not available; therefore, assumed values for soil contact rates are uncertain. Values selected may be conservative or liberal, leading to an overestimation or underestimation of risk, respectively.
- Dermal uptake of soil COPCs is difficult to estimate. The uptake rate depends on both chemical-specific and Site soil characteristics. Absorption values used to estimate dermal uptake are highly uncertain, possibly leading to an overestimation or underestimation of dose.
- The exposure to both fugitive dust and vapors from VOCs in soil is assumed for VOCs, which may overestimate dose.

5.5.2 Risk Characterization

5.5.2.1 Noncarcinogenic Risk Evaluation

Tables 37 through 44 present calculations of results of noncarcinogenic hazards for the post-remediation utility worker scenario and Table 54 presents the combined HI values. The overall scenario

noncarcinogenic HI is 0.5 for the RME and 0.4 for the CT, which are below the generalized level of concern of 1 for noncarcinogenic effects.

5.5.2.2 Carcinogenic Risk Evaluation

Tables 37 through 44 present calculations of lifetime cancer risks for the post-remediation utility worker scenario and Table 54 presents the combined carcinogenic risk values. The excess lifetime cancer risk is 1×10^{-7} for the RME and 2×10^{-8} for the CT. Both the RME and CT cancer risks are below the Illinois EPA no-action level of 1×10^{-6} .

5.5.2.3 Uncertainties Related to Risk Evaluation

Uncertainty factors already presented in the preceding sections (exposure assessment and toxicity assessment) also contribute uncertainty to risk estimates for the following reasons:

- COPC exposure concentrations may be overestimated or underestimated because of the limited number of samples collected to represent Site soil.
- Assumed exposure values for the duration and rate of exposure may not represent actual values.
- Toxicity values are uncertain because of dose-response and extrapolation factors.
- Carcinogenic and noncarcinogenic risks are each combined across COPCs. It is assumed that
 chemical-specific risks are independent and additive; however, COPCs may interact to produce a
 less than additive effect or a more than additive effect. Chemical interaction data are lacking for
 most chemical mixtures. In the absence of this information, the standard approach is to assume
 COPC additivity, which may result in an overestimation or underestimation of risk.

5.6 POST-REMEDIATION CONSTRUCTION WORKER SCENARIO

In this section, the exposure assessment and risk characterization for the post-remediation construction worker scenario is explained. Specific assumptions and values for the exposure scenario are discussed, followed by the noncarcinogenic and carcinogenic risk evaluation results.

5.6.1 Exposure Assessment

5.6.1.1 Characterization of Exposure Setting

This scenario evaluates potential exposure for a post-remediation construction worker at the Site. The top 3 feet of soil will be removed across the Site during remediation and replaced with imported clean fill. During any future construction work, excavations could provide exposure to COPCs in soil from 3 feet to a depth equal to the vertical extent of COPCs (17 feet bgs), an assumed maximum depth for typical construction excavations. During construction work, ingestion of and dermal contact with soil are likely to occur, as well as inhalation of airborne soil and vapors volatilized from soil.

5.6.1.2 Identification of Exposure Pathway

The following pathways were identified for the post-remediation construction worker:

- Incidental ingestion of soil resulting from placing soil-contaminated hands or objects in the mouth and possibly from dust caught in the nose and throat being moved to the back of the mouth and swallowed.
- Dermal contact with soil resulting in the absorption of COPCs.
- Inhalation of airborne soil and dust, which results from breathing respirable particles of soil containing COPCs.
- Inhalation of VOC vapors released from soil during construction activities and disruption of the soil surface.

5.6.1.3 Quantification of Exposure

Most values used for the HIFs were obtained from the USEPA and Illinois EPA guidance (USEPA 1991, 1997a, 2002a, 2004c and IAC 2002) and are summarized in Table 45. A Site-specific exposure frequency of 250 days per year for the RME and 125 days per year for the CT was assumed to represent a conservative average redevelopment construction project excavation period of 1 year for the RME and 6 months for the CT. Tables 46 through 53 present exposure concentrations and DIs for the above exposure pathways.

5.6.1.4 Uncertainties Related to Exposure Assessment

Uncertainties similar to those discussed for the post-remediation resident 1 (Section 5.3.1.4) and utility worker (Section 5.5.1.4) also apply to the post-remediation construction worker scenario.

5.6.2 Risk Characterization

5.6.2.1 Noncarcinogenic Risk Evaluation

Tables 46 through 53 present calculations of results of noncarcinogenic hazards for the post-remediation construction worker scenario and Table 54 presents the combined HI values. The overall scenario noncarcinogenic HI is 0.5 for the RME and 0.4 for the CT, which are both below the generalized level of concern of 1 for noncarcinogenic effects.

5.6.2.2 Carcinogenic Risk Evaluation

Tables 46 through 53 present calculations of lifetime cancer risks for the post-remediation construction worker scenario and Table 54 presents the combined carcinogenic risk values. The excess lifetime cancer risk is 1×10^{-6} for the RME and 2×10^{-7} for the CT. The RME cancer risk is above the Illinois EPA no-action level of 1×10^{-6} . The CT cancer risk is below the Illinois EPA no-action level of 1×10^{-6} .

5.6.2.3 Uncertainties Related to Risk Evaluation

Uncertainties similar to those discussed for the post-remediation resident 1 scenario (Section 5.3.2.3) and utility worker (Section 5.5.1.4) also apply to the post-remediation construction worker scenario.

* * * * *

6.0 RISK ASSESSMENT SUMMARY

The Tier 3 risk evaluation was performed for future resident, utility worker and construction worker receptors at the Site based on the soil data sets containing samples collected from soil that will remain on-site following remediation. These data sets contain only samples collected during site investigation activities and are therefore limited. The scenarios and risk assessment variables used in this evaluation will be used to conduct a formal risk assessment to be included in the RACR. The RACR Tier 3 risk assessment will use data sets including both soil sample results from site investigation soil samples and confirmation soil samples; and will fully evaluate risk to resident, utility worker and construction worker receptors at the Site.

The lower of the two resident receptors EPCs (resident 1 or resident 2) calculated in this risk evaluation will be used as a Tier 3 screening level for confirmation samples collected during remediation activities.

* * * *

7.0 REFERENCES

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¹ Year referenced on oral and dermal toxicity tables is that of most recent version of individual chemical toxicological profile.

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Tables
Tier 3 Risk Evaluation
The Former Willow Street Station
Manufactured Gas Plant Site,
1640 North Kingsbury Street

Table 1 Soil Analytical Results Post-Remediation Resident 1 and Utility Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location	on and Depth (feet be	low ground surface)/	Concentration	
	SB01-002	SP02-002	SP03-002	SP16-002	SB31-002	SB33-002
Compound/Analyte	8-10	3-4	4-5	9-10	6-8	5-7
Compoundation		TCL Volat	iles (mg/kg)			
Acetone	0.041 U	0.091	0.32	0.1	0.064 U	0.12
Benzene	0.0082 U	0.015	0.017 U	0.0098 U	0.013 U	0.012 U
Bromodichloromethane	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
Bromoform	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
Bromomethane	0.016 U	0.016 U	0.034 U	0.02 U	0.026 U	0.024 U
2-Butanone	0.016 U	0.02	0.072	0.02 U	0.026 U	0.027
Carbon Disulfide	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
Carbon Tetrachloride	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
Chlorobenzene	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
Chloroethane	0.016 U	0.016 U	0.034 U	0.02 U	0.026 U	0.024 U
Chloroform	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
Chloromethane	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
Dibromochloromethane	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
1,1-Dichloroethane	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
1,2-Dichloroethane	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
1,1-Dichloroethene	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
cis-1,2-Dichloroethene	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
trans-1,2-Dichloroethene	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
1,2-Dichloropropane	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
cis-1,3-Dichloropropene	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
trans-1,3-Dichloropropene	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
Ethylbenzene	0.0082 U	0.049	0.017 U	0.0098 U	0.013 U	0.012 U
2-Hexanone	0.016 U	0.016 U	0.034 U	0.02 U	0.026 U	0.024 U
4-Methyl-2-Pentanone	0.016 U	0.016 U	0.034 U	0.02 U	0.026 U	0.024 U
Methylene Chloride	0.016 U	0.016 U	0.034 U	0.02 U	0.026 U	0.024 U
Styrene	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
1,1,2,2-Tetrachloroethane	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
Tetrachloroethene	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
Toluene	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
1,1,1-Trichloroethane	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
1,1,2-Trichloroethane	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
Trichloroethene	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
Vinyl Chloride	0.016 U	0.016 U	0.034 U	0.02 U	0.026 U	0.024 U
m,p-Xylene	0.0082 U	0.0081 U	0.017 U	0.0098 U	0.013 U	0.012 U
o-Xylene	0.0082 U	0.012	0.017 U	0.0098 U	0.013 U	0.025

NOTE:

⁽¹⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit

Post-Remediation Resident 1 and Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Locatio	n and Depth (feet bel	low ground surface)/(Concentration	
	SB01-002	SP02-002	SP03-002	SP16-002	SB31-002	SB33-002
Compound/Analyte	8-10	3-4	4-5	9-10	6-8	5-7
	<u> </u>	TCL Semivola	atiles (mg/kg)			
Bis(2-chloroethoxy)methane	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
Bis(2-chloroethyl)ether	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
Bis(2-ethylhexyl)phthalate	0.45	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
4-Bromophenyl phenyl ether	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
Butyl benzyl phthalate	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
Carbazole	0.38 U	0.47	0.44 U	0.39 U	0.37 U	0.4 U
4-Chloro-3-methylphenol	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
1-Chloroaniline	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
2-Chloronaphthalene	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
2-Chlorophenol	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
I-Chlorophenyl phenyl ether	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
Dibenzofuran	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
1,2-Dichlorobenzene	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
1,3-Dichlorobenzene	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
1.4-Dichlorobenzene	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
3,3-Dichlorobenzidine	0.76 U	0.75 U	0.89 U	0.77 U	0.74 U	0.81 U
2.4-Dichlorophenol	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
Diethyl phthalate	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
Dimethyl phthalate	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
Di-n-butyl phthalate	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
2,4-Dimethylphenol	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
4,6-Dinitro-2-methylphenol	1.8 U	1.8 U	2.1 U	1.9 U	1.8 U	2 U
2,4-Dinitrophenol	1.8 U	1.8 U	2.1 U	1.9 U	1.8 U	2 U
2.4-Dinitrotoluene	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
2.6-Dinitrotoluene	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
Di-n-octyl phthalate	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
Hexachlorobenzene	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
Hexachlorobutadiene	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
Hexachlorocyclopentadiene	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
Hexachloroethane	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
Isophorone	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
2-Methylnaphthalene	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
2-Methylphenol	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
4-Methylphenol (m/p-cresols)	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
2-Nitroaniline	1.8 U	1.8 U	2.1 U	1.9 U	1.8 U	2 U
3-Nitroaniline	1.8 U	1.8 U	2.1 U	1.9 U	1.8 U	2 U
4-Nitroaniline	1.8 U	1.8 U	2.1 U	1.9 U	1.8 U	2 U
Nitrobenzene	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
2-Nitrophenol	1.8 U	1.8 U	2.1 U	1.9 U	1.8 U	2 U
4-Nitrophenol	1.8 U	1.8 U	2.1 U	1.9 U	1.8 U	2 U
N-Nitrosodi-n-propylamine	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
N-Nitrosodiphenylamine	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
2,2-Oxybis(1-Chloropropane)	0.016 U	0.016 U	0.019 U	0.016 U	0.016 U	0.017 U
Pentachlorophenol	1.8 U	1.8 U	2.1 U	1.9 U	1.8 U	2 U
Phenol	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
1,2,4-Trichlorobenzene	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U
2,4,5-Trichlorophenol	0.76 U	0.75 U	0.89 U	0.77 U	0.74 U	0.81 U
2,4,6-Trichlorophenol	0.38 U	0.38 U	0.44 U	0.39 U	0.37 U	0.4 U

NOTE:

 $(1)\ U-Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected; the\ associated\ value\ is\ the\ sample\ reporting\ limit$

Post-Remediation Resident 1 and Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Locatio	n and Depth (feet be	low ground surface)/C	Concentration	
	SB01-002	SP02-002	SP03-002	SP16-002	SB31-002	SB33-002
Compound/Analyte	8-10	3-4	4-5	9-10	6-8	5-7
		PAHs (mg/kg)			
Acenaphthene	0.029 U	0.19	0.034 U	0.029 U	0.028 U	0.031 U
Acenaphthylene	0.029 U	0.13	0.034 U	0.029 U	0.029	0.031 U
Anthracene	0.16	0.3	0.034 U	0.029 U	0.047	0.031 U
Benzo(a)anthracene	0.34	0.43	0.034 U	0.029 U	0.028 U	0.031 U
Benzo(b)fluoranthene	0.32	0.36	0.034 U	0.029 U	0.028 U	0.031 U
Benzo(k)fluoranthene	0.26	0.39	0.034 U	0.029 U	0.028 U	0.031 U
Benzo(g,h,i)perylene	0.23	0.48	0.034 U	0.029 U	0.028 U	0.031 U
Benzo(a)pyrene	0.21	0.52	0.034 U	0.029 U	0.028 U	0.031 U
Chrysene	0.67	0.62	0.034 U	0.029 U	0.075	0.031 U
Dibenzo(a,h)anthracene	0.099	0.13	0.034 U	0.029 U	0.028 U	0.031 U
Fluoranthene	1.1	0.85	0.034 U	0.029 U	0.075	0.031 U
Fluorene	0.029 U	0.21	0.034 U	0.029 U	0.03	0.031 U
indeno(1,2,3-cd)pyrene	0.2	0.35	0.034 U	0.029 U	0.028 U	0.031 U
Vaphthalene	0.044	0.28	0.034 U	0.029 U	0.11	0.14
Phenanthrene	0.35	1	0.034 U	0.029 U	0.17	0.076
yrene	1.2	1.1	0.034 U	0.029 U	0.13	0.047
		PCBs (mg/kg)			
Aroclor 1016	0.093 U	0.09 U	0.1 U	0.094 U	0.093 U	0.096 U
Aroclor 1221	0.093 U	0.09 U	0.1 U	0.094 U	0.093 U	0.096 U
Aroclor 1232	0.093 U	0.09 U	0.1 U	0.094 U	0.093 U	0.096 U
Aroclor 1242	0.093 U	0.09 U	0.1 U	0.094 U	0.093 U	0.096 U
Aroclor 1248	0.093 U	0.09 U	0.1 U	0.094 U	0.093 U	0.096 U
Aroclor 1254	0.19 U	0.18 U	0.2 U	0.19 U	0.19 U	0.19 U
Aroclor 1260	0.19 U	0.18 U	0.2 U	0.19 U	0.19 U	0.19 U
	Prior	ity Pollutant Metals a	nd Total Cyanide (m	ıg/kg)		
Antimony	1 UJ	1 U	1.2 U	1 UJ	1.1 UJ	1.1 UJ
Arsenic	9.2	2.5	3.6	12 J	12 Ј	5.1 J
Barium	47	19	58	79 J	31 J	97 J
Beryllium	0.87	0.63	1.3	1.1	0.93	1.2
Cadmium	0.54	0.52 U	0.6 U	0.52 U	0.55 U	0.59
Chromium	20	6.9	20	17 Ј	19 Ј	17 J
Copper	32	8.9	18	39 J	29 J	31 J
ead	41	31	17	21	18	17
Mercury	0.28	0.035	0.031 U	0.027 U	0.037	0.046
Vickel	33	5.5	24	37 J	31 J	26 J
Selenium	1 Ü	1 U	1.2 U	1 U	1.1 U	1.1 U
Silver	1 U	1 U	1.2 U	1 U	1.1 U	1.1 U
Гhallium	4.2	1 U	1.2	1.8	1.2	1.9
Zinc	70 J	23	63	40 J	45 J	54 J
Total Cyanide	0.27 U	0.26 U	0.31 U	0.25 U	0.27 U	0.34 U

NOTES:

(1) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit (2) J - Indicates an estimated value.

Post-Remediation Resident 1 and Utility Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	l Sam	ple Location and De	oth (feet below ground	d surface)/Concentrati	on
	SP34-002	SP35-002	SP37-002	SP40-002	SP44-002
Compound/Analyte	5-7	6-7	8-9	7-8	6-7
Compound/maryte		TCL Volatiles (mg/k	g)		
Acetone	0.14	0.13	0.082	0.071	0.082
Benzene	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
Bromodichloromethane	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
Bromoform	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
Bromomethane	0.024 U	0.023 U	0.02 U	0.02 U	0.018 U
2-Butanone	0.024 U	0.027	0.02 U	0.02 U	0.018 U
Carbon Disulfide	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
Carbon Tetrachloride	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
Chlorobenzene	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
Chloroethane	0.024 U	0.023 U	0.02 U	0.02 U	0.018 U
Chloroform	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
Chloromethane	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
Dibromochloromethane	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
1.1-Dichloroethane	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
1,2-Dichloroethane	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
1,1-Dichloroethene	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
cis-1,2-Dichloroethene	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
trans-1,2-Dichloroethene	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
1,2-Dichloropropane	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
cis-1,3-Dichloropropene	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
trans-1,3-Dichloropropene	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
Ethylbenzene	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
2-Hexanone	0.024 U	0.023 U	0.02 U	0.02 U	0.018 U
4-Methyl-2-Pentanone	0.024 U	0.023 U	0.02 U	0.02 U	0.018 U
Methylene Chloride	0.024 U	0.023 U	0.02 U	0.02 U	0.018 U
Styrene	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
1,1,2,2-Tetrachloroethane	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
Tetrachloroethene	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
Toluene	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
1,1,1-Trichloroethane	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
1,1,2-Trichloroethane	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
Trichloroethene	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
Vinyl Chloride	0.024 U	0.023 U	0.02 U	0.02 U	0.018 U
m,p-Xylene	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U
o-Xylene	0.012 U	0.012 U	0.0099 U	0.01 U	0.0089 U

⁽¹⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit. (2) J - Indicates an estimated value.

Post-Remediation Resident 1 and Utility Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Sam	ple Location and De	pth (feet below ground	surface)/Concentrati	on
	SP34-002	SP35-002	SP37-002	SP40-002	SP44-002
Compound/Analyte	5-7	6-7	8-9	7-8	6-7
Compound in mary to	TO	CL Semivolatiles (mg	/kg)		
Bis(2-chloroethoxy)methane	0,4 U	0.39 U	0.39 U	0.39 U	0.4 U
Bis(2-chloroethyl)ether	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
Bis(2-ethylhexyl)phthalate	0,4 U	0.39 U	0.39 U	0.39 U	0.4 U
4-Bromophenyl phenyl ether	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
Butyl benzyl phthalate	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
Carbazole	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
4-Chloro-3-methylphenol	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
4-Chloroaniline	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
2-Chloronaphthalene	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
2-Chlorophenol	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
4-Chlorophenyl phenyl ether	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
Dibenzofuran	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
1,2-Dichlorobenzene	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
1,3-Dichlorobenzene	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
1,4-Dichlorobenzene	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
3,3-Dichlorobenzidine	0.8 U	0.79 U	0.77 U	0.77 U	0.79 U
2,4-Dichlorophenol	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
Diethyl phthalate	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
Dimethyl phthalate	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
Di-n-butyl phthalate	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
2,4-Dimethylphenol	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
4,6-Dinitro-2-methylphenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dinitrophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
2,4-Dinitrotoluene	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
2,6-Dinitrotoluene	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
Di-n-octyl phthalate	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
Hexachlorobenzene	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
Hexachlorobutadiene	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
Hexachlorocyclopentadiene	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
Hexachloroethane	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
Isophorone	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
2-Methylnaphthalene	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
2-Methylphenol	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
4-Methylphenol (m/p-cresols)	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
2-Nitroaniline	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
3-Nitroaniline	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitroaniline	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Nitrobenzene	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
2-Nitrophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
4-Nitrophenol	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
N-Nitrosodi-n-propylamine	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
N-Nitrosodiphenylamine	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
2,2-Oxybis(1-Chloropropane)	0.017 U	0.017 U	0.016 U	0.016 U	0.017 U 1.9 U
Pentachlorophenol	1.9 U	1.9 U	1.9 U	1.9 U	
Phenol	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
1,2,4-Trichlorobenzene	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U
2,4,5-Trichlorophenol	0.8 U	0.79 U	0.77 U	0.77 U	0.79 U
2,4,6-Trichlorophenol	0.4 U	0.39 U	0.39 U	0.39 U	0.4 U

NOTE:

 $^{(1)\} U\ -\ Indicates\ compound/analyte\ was\ analyzed\ for\ but\ not\ detected;\ the\ associated\ value\ is\ the\ sample\ reporting\ limit.$

Post-Remediation Resident 1 and Utility Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Sam	ple Location and De	pth (feet below ground	d surface)/Concentrati	on
	SP34-002	SP35-002	SP37-002	SP40-002	SP44-002
Compound/Analyte	5-7	6-7	8-9	7-8	6-7
		PAHs (mg/kg)			
Acenaphthene	0.12	0.03 U	0.029 U	0.029 U	0.03 U
Acenaphthylene	0.086	0.03 U	0.029 U	0.029 U	0.03 U
Anthracene	0.17	0.03 U	0.029 U	0.029 U	0.03 U
Benzo(a)anthracene	0.094	0.064	0.029 U	0.029 U	0.03 U
Benzo(b)fluoranthene	0.13	0.041	0.029 U	0.029 U	0.03 U
Benzo(k)fluoranthene	0.14	0.056	0.029 U	0.029 U	0.03 U
Benzo(g,h,i)perylene	0.36	0.037	0.029 U	0.029 U	0.03 U
Benzo(a)pyrene	0.14	0.072	0.029 U	0.029 U	0.03 U
Chrysene	0.39	0.066	0.029 U	0.029 U	0.03 U
Dibenzo(a,h)anthracene	0.11	0.03 U	0.029 U	0.029 U	0.03 U
Fluoranthene	0.33	0.074	0.029 U	0.029 U	0.03 U
Fluorene	0.31	0.03 U	0.029 U	0.029 U	0.03 U
Indeno(1,2,3-cd)pyrene	0.24	0.036	0.029 U	0.029 U	0.03 U
Naphthalene	0.03 U	0.03 U	0.056	0.029 U	0.03 U
Phenanthrene	0.13	0.03 U	0.029 U	0.029 U	0.03 U
Pyrene	1.2	0.074	0.029 U	0.029 U	0.03 U
		PCBs (mg/kg)			
Aroclor 1016	0.098 U	0.095 U	0.092 U	0.093 U	0.096 U
Aroclor 1221	0.098 U	0.095 U	0.092 U	0.093 U	0.096 U
Aroclor 1232	0.098 U	0.095 U	0.092 U	0.093 U	0.096 U
Aroclor 1242	0.098 U	0.095 U	0.092 U	0.093 U	0.096 U
Aroclor 1248	0.098 U	0.095 U	0.092 U	0.093 U	0.096 U
Aroclor 1254	0.2 U	0.19 U	0.18 U	0.19 U	0.19 U
Aroclor 1260	0.2 U	0.19 U	0.18 U	0.19 U	0.19 U
	Priority Polluta	ant Metals and Total	Cyanide (mg/kg)		
Antimony	1.2 UJ	1.1 UJ	0.97 UJ	1.1 UJ	1.1 UJ
Arsenic	7.5 J	5.8 J	15 J	10 J	13 J
Barium	100 J	98 J	98 J	88 J	79 J
Beryllium	1.3	0.83	1.2	1.1	1.2
Cadmium	0.59 U	0.56 U	0.53	0.56 U	0.57 U
Chromium	21 J	11 J	20 J	16 J	20 J
Copper	28 J	11 J	38 J	33 J	31 J
Lead	19	36	22	19	19
Mercury	0.031 U	0.14	0.026 U	0.029 U	0.03 U
Nickel	33 Ј	12 J	38 J	36 J	39 J
Selenium	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U
Silver	1.2 U	1.1 U	0.97 U	1.1 U	1.1 U
Thallium	2.1	2	2	2.2	1.8
Zinc	53 J	40 J	46 J	52 J	52 J
Total Cyanide	0.31 U	0.29 U	0.25 U	0.32 U	0.32 U

⁽¹⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit (2) J - Indicates an estimated value.

Table 2 Soil Analytical Results Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	1	Sample Location	on and Depth (feet be	low ground surface)/	Concentration	
	SB01-002	SP02-002	SP03-002	SP07-003	SP13-003	SB15-003
Compound/Analyte	8-10	3-4	4-5	16-17	15-16	10-12
		TCL Volat	iles (mg/kg)	····		
Acetone	0.041 U	0.091	0.32	0.046 U	0.055 U	0.1
Benzene	0.0082 U	0.015	0.017 U	0.0093 U	0.011 U	0.011 U
Bromodichloromethane	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
Bromoform	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
Bromomethane	0.016 U	0.016 U	0.034 U	0.019 U	0.022 U	0.022 U
2-Butanone	0.016 U	0.02	0.072	0.019 U	0.022 U	0.022 U
Carbon Disulfide	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
Carbon Tetrachloride	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
Chlorobenzene	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
Chloroethane	0.016 U	0.016 U	0.034 U	0.019 U	0.022 U	0.022 U
Chloroform	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
Chloromethane	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
Dibromochloromethane	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
1,1-Dichloroethane	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
1,2-Dichloroethane	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
1,1-Dichloroethene	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
cis-1,2-Dichloroethene	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
trans-1,2-Dichloroethene	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
1,2-Dichloropropane	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
cis-1,3-Dichloropropene	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
trans-1,3-Dichloropropene	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
Ethylbenzene	0.0082 U	0.049	0.017 U	0.0093 U	0.011 U	0.011 U
2-Hexanone	0.016 U	0.016 U	0.034 U	0.019 U	0.022 U	0.022 U
4-Methyl-2-Pentanone	0.016 U	0.016 U	0.034 U	0.019 U	0.022 U	0.022 U
Methylene Chloride	0.016 U	0.016 U	0.034 U	0.019 U	0.022 U	0.022 U
Styrene	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
1,1,2,2-Tetrachloroethane	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
Tetrachloroethene	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
Toluene	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
1,1,1-Trichloroethane	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
1,1,2-Trichloroethane	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
Trichloroethene	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
Vinyl Chloride	0.016 U	0.016 U	0.034 U	0.019 U	0.022 U	0.022 U
m,p-Xylene	0.0082 U	0.0081 U	0.017 U	0.0093 U	0.011 U	0.011 U
o-Xylene	0.0082 U	0.012	0.017 U	0.0093 U	0.011 U	0.011 U

NOTE:

⁽¹⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

Soil Analytical Results

Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Locatio	n and Depth (feet bel	ow ground surface)/C	Concentration	
	SB01-002	SP02-002	SP03-002	SP07-003	SP13-003	SB15-003
Compound/Analyte	8-10	3-4	4-5	16-17	15-16	10-12
Compound/ maryee		TCL Semivola	atiles (mg/kg)			
Bis(2-chloroethoxy)methane	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
Bis(2-chloroethyl)ether	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
Bis(2-ethylhexyl)phthalate	0.45	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
-Bromophenyl phenyl ether	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
Butyl benzyl phthalate	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
Carbazole	0.38 U	0.47	0.44 U	0.39 U	0.39 U	0.42 U
-Chloro-3-methylphenol	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
-Chloroaniline	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
-Chloronaphthalene	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
-Chlorophenol	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
-Chlorophenyl phenyl ether	0.38 U	0,38 U	0.44 U	0.39 U	0.39 U	0.42 U
Dibenzofuran	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
.2-Dichlorobenzene	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
,3-Dichlorobenzene	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
.4-Dichlorobenzene	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
3.3-Dichlorobenzidine	0.76 U	0.75 U	0.89 U	0.79 U	0.78 U	0.85 U
,4-Dichlorophenol	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
Diethyl phthalate	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
Dimethyl phthalate	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
Di-n-butyl phthalate	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
2,4-Dimethylphenol	1.8 U	1.8 U	2.1 U	1.9 U	1.9 U	2.1 U
2,4-Dinitro-2-methylphenol	1.8 U	1.8 U	2.1 U	1.9 U	1.9 U	2.1 U
<u> </u>	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
2,4-Dinitrotoluene	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
2,6-Dinitrotoluene	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
Di-n-octyl phthalate	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
Hexachlorobenzene	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
Hexachlorobutadiene	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
Hexachlorocyclopentadiene	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
Hexachloroethane	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
sophorone	0.38 U	0.38 U	0.44 U	0.39 U	0.79	0.42 U
2-Methylnaphthalene	0.38 U	0.38 U	0,44 U	0.39 U	0.39 U	0.42 U
2-Methylphenol	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
4-Methylphenol (m/p-cresols)	1.8 U	1.8 U	2.1 U	1.9 U	1.9 U	2.1 U
2-Nitroaniline	1.8 U	1.8 U	2.1 U	1.9 U	1.9 U	2.1 U
3-Nitroaniline	1.8 U	1.8 U	2.1 U	1,9 U	1.9 U	2.1 U
4-Nitroaniline	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
Nitrobenzene		1.8 U	2.1 U	1.9 U	1.9 U	2.1 U
2-Nitrophenol	1.8 U	1.8 U	2.1 U	1.9 U	1.9 U	2.1 U
1-Nitrophenol	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
N-Nitrosodi-n-propylamine	0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
N-Nitrosodiphenylamine		0.016 U	0.019 U	0.017 U	0.017 U	0.018 U
2,2-Oxybis(1-Chloropropane)	0.016 U	1.8 U	2.1 U	1.9 U	1.9 U	2.1 U
Pentachlorophenol	1.8 U 0.38 U	0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
Phenol		0.38 U	0.44 U	0.39 U	0.39 U	0.42 U
1,2,4-Trichlorobenzene	0.38 U	0.38 U	0.44 U	0.79 U	0.78 U	0.85 U
2,4,5-Trichlorophenol 2,4,6-Trichlorophenol	0.76 U 0.38 U	0.73 U	0.89 U	0.39 U	0.39 U	0.42 U

(1) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	T T	Sample Locatio	n and Depth (feet bel	ow ground surface)/C	Concentration	
	SB01-002	SP02-002	SP03-002	SP07-003	SP13-003	SB15-003
Compound/Analyte	8-10	3-4	4-5	16-17	15-16	10-12
Compound Findings		PAHs (mg/kg)			
Acenaphthene	0.029 U	0.19	0.034 U	0.03 U	0.077	0.032 U
Acenaphthylene	0,029 U	0.13	0.034 U	0.03 U	0.03 U	0.032 U
Anthracene	0.16	0.3	0.034 U	0.03 U	0.03 U	0.032 U
Benzo(a)anthracene	0.34	0.43	0.034 U	0.03 U	0.03 U	0.032 U
Benzo(b)fluoranthene	0.32	0.36	0.034 U	0.03 U	0.03 U	0.032 U
Benzo(k)fluoranthene	0.26	0.39	0.034 U	0.03 U	0.03 U	0.032 U
Benzo(g,h,i)perylene	0.23	0.48	0.034 U	0.03 U	0.03 U	0.032 U
Benzo(a)pyrene	0.21	0.52	0.034 U	0.03 U	0.03 U	0.032 U
Chrysene	0.67	0.62	0.034 U	0.03 U	0.03 U	0.032 U
Dibenzo(a,h)anthracene	0.099	0.13	0.034 U	0.03 U	0.03 U	0.032 U
Fluoranthene	1.1	0.85	0.034 U	0.03 U	0.03 U	0.032 U
Fluorene	0.029 U	0.21	0.034 U	0.03 U	0.036	0.032 U
Indeno(1,2,3-cd)pyrene	0.2	0.35	0.034 U	0.03 U	0.03 U	0.032 U
Naphthalene	0.044	0.28	0.034 U	0.03 U	1.1	0.032 U
Phenanthrene	0.35	1	0.034 U	0.03 U	0.063	0.032 U
Pyrene	1.2	1.1	0.034 U	0.03 U	0.03 U	0.032 U
		PCBs (mg/kg)			
Aroclor 1016	0.093 U	0.09 U	0.1 U	0.096 U	0.093 U	0.1 U
Aroclor 1221	0.093 U	0.09 U	0.1 U	0.096 U	0.093 U	0.1 U
Aroclor 1232	0.093 U	0.09 U	0.1 U	0.096 U	0.093 U	0.1 U
Aroclor 1242	0.093 U	0.09 U	0.1 U	0.096 U	0.093 U	0.1 U
Aroclor 1248	0.093 U	0.09 U	0.1 U	0.096 U	0.093 U	0.1 U
Aroclor 1254	0.19 U	0.18 U	0.2 U	0.19 U	0.19 U	0.21 U
Aroclor 1260	0.19 U	0.18 U	0.2 U	0.19 U	0.19 U	0.21 U
	Prio	rity Pollutant Metals	and Total Cyanide (m			
Antimony	1 UJ	1 U	1.2 U	1.1 UJ	1 UJ	1.1 U
Arsenic	9.2	2.5	3.6	8.1 J	9.6 J	5 J
Barium	47	19	58	98 J	74 J	22 J
Beryllium	0.87	0.63	1.3	1.2	1	1.2
Cadmium	0.54	0.52 U	0.6 U	0.57 U	0.66	0.57 U
Chromium	20	6.9	20	21 J	17 J	19 J
Copper	32	8.9	18	24 J	34 J	31 J
Lead	41	31	17	16	19	16
Mercury	0.28	0.035	0.031 U	0.032 U	0.061	0.032 U
Nickel	33	5.5	24	31 J	30 J	30 J
Selenium	1 U	1 U	1.2 U	1.1 U	1 U	1.1 U
Silver	1 U	1 U	1.2 U	1.1 U	1 U	1.1 U
Thallium	4.2	1 U	1.2	2.1	1.9	2.5
Zinc	70 J	23	63	39 J	42 J	42 J
Total Cyanide	0.27 U	0.26 U	0.31 U	0.29 U	0.26 U	0.28 U

(2) J - Indicates an estimated value

⁽¹⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit.

Post-Remediation Resident 2 and Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location	on and Depth (feet be	elow ground surface)/	Concentration	
	SP16-002	SP16-003	SB31-002	SB33-002	SB33-003	SP34-002
Compound/Analyte	9-10	15-16	6-8	5-7	10-12	5-7
Compounds many to	كسيد ثثث سيالي		iles (mg/kg)			
Acetone	0.1	0.062 U	0.064 U	0.12	0.064 U	0.14
Benzene	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
Bromodichloromethane	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
Bromoform	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
Bromomethane	0.02 U	0.025 U	0.026 U	0.024 U	0.026 U	0.024 U
2-Butanone	0.02 U	0.025 U	0.026 U	0.027	0.026 U	0.024 U
Carbon Disulfide	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
Carbon Tetrachloride	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
Chlorobenzene	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
Chloroethane	0.02 U	0.025 U	0.026 U	0.024 U	0.026 U	0.024 U
Chloroform	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
Chloromethane	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
Dibromochloromethane	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
1.1-Dichloroethane	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
1,2-Dichloroethane	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
1,1-Dichloroethene	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
cis-1,2-Dichloroethene	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
trans-1,2-Dichloroethene	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
1,2-Dichloropropane	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
cis-1,3-Dichloropropene	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
trans-1,3-Dichloropropene	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
Ethylbenzene	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
2-Hexanone	0.02 U	0.025 U	0.026 U	0.024 U	0.026 U	0.024 U
4-Methyl-2-Pentanone	0.02 U	0.025 U	0.026 U	0.024 U	0.026 U	0.024 U
Methylene Chloride	0.02 U	0.025 U	0.026 U	0.024 U	0.026 U	0.024 U
Styrene	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
1,1,2,2-Tetrachloroethane	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 Ŭ	0.012 U
Tetrachloroethene	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
Toluene	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
1,1,1-Trichloroethane	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
1,1,2-Trichloroethane	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
Trichloroethene	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
Vinyl Chloride	0.02 U	0.025 U	0.026 U	0.024 U	0.026 U	0.024 U
m,p-Xylene	0.0098 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
o-Xylene	0.0098 U	0.012 U	0.013 U	0.025	0.013 U	0.012 U

(1) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit

Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location	n and Depth (feet be	low ground surface)/C	Concentration	
	SP16-002	SP16-003	SB31-002	SB33-002	SB33-003	SP34-002
Compound/Analyte	9-10	15-16	6-8	5-7	10-12	5-7
		TCL Semivol	atiles (mg/kg)			
Bis(2-chloroethoxy)methane	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
Bis(2-chloroethyl)ether	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
Bis(2-ethylhexyl)phthalate	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
4-Bromophenyl phenyl ether	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
Butyl benzyl phthalate	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
Carbazole	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
4-Chloro-3-methylphenol	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
4-Chloroaniline	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
2-Chloronaphthalene	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
2-Chlorophenol	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
4-Chlorophenyl phenyl ether	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
Dibenzofuran	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
1,2-Dichlorobenzene	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
1.3-Dichlorobenzene	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
1,4-Dichlorobenzene	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
3.3-Dichlorobenzidine	0.77 U	0.77 U	0.74 U	0.81 U	0.79 U	0.8 U
2,4-Dichlorophenol	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
Diethyl phthalate	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
Dimethyl phthalate	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
Di-n-butyl phthalate	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
2,4-Dimethylphenol	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
4,6-Dinitro-2-methylphenol	1.9 U	1.9 U	1.8 U	2 U	1.9 U	1.9 U
2,4-Dinitrophenol	1.9 U	1.9 U	1.8 U	2 U	1.9 U	1.9 U
2,4-Dinitrotoluene	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
2.6-Dinitrotoluene	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
Di-n-octyl phthalate	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
Hexachlorobenzene	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
Hexachlorobutadiene	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
Hexachlorocyclopentadiene	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
Hexachloroethane	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
Isophorone	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
2-Methylnaphthalene	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
2-Methylphenol	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
4-Methylphenol (m/p-cresols)	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
2-Nitroaniline	1.9 U	1.9 U	1.8 U	2 U	1.9 U	1.9 U
3-Nitroaniline	1.9 U	1.9 U	1.8 U	2 U	1.9 U	1.9 U
4-Nitroaniline	1.9 U	1.9 U	1.8 U	2 U	1.9 U	1.9 U
Nitrobenzene	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
2-Nitrophenol	1.9 U	1.9 U	1.8 U	2 U	1.9 U	1.9 U
4-Nitrophenol	1.9 U	1.9 U	1.8 U	2 U	1.9 U	1.9 U
N-Nitrosodi-n-propylamine	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
N-Nitrosodiphenylamine	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
2,2-Oxybis(1-Chloropropane)	0.016 U	0.016 U	0.016 U	0.017 U	0.017 U	0.017 U
Pentachlorophenol	1.9 U	1.9 U	1.8 U	2 U	1.9 U	1.9 U
Phenol	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
1.2.4-Trichlorobenzene	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U
2,4,5-Trichlorophenol	0.77 U	0.77 U	0.74 U	0.81 U	0.79 U	0.8 U
2,4,6-Trichlorophenol	0.39 U	0.39 U	0.37 U	0.4 U	0.39 U	0.4 U

⁽¹⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit

Soil Analytical Results

Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	1	Sample Location	n and Depth (feet be	low ground surface)/0	Concentration	
	SP16-002	SP16-003	SB31-002	SB33-002	SB33-003	SP34-002
Compound/Analyte	9-10	15-16	6-8	5-7	10-12	5-7
		PAHs (mg/kg)			
Acenaphthene	0.029 U	0.029 U	0.028 U	0.031 U	0.03 U	0.12
Acenaphthylene	0.029 U	0.029 U	0.029	0.031 U	0.03 U	0.086
Anthracene	0.029 U	0.029 U	0.047	0.031 U	0.03 U	0.17
Benzo(a)anthracene	0.029 U	0.029 U	0.028 U	0.031 U	0.03 U	0.094
Benzo(b)fluoranthene	0.029 U	0.029 U	0.028 U	0.031 U	0.03 U	0.13
Benzo(k)fluoranthene	0.029 U	0.029 U	0.028 U	0.031 U	0.03 U	0.14
Benzo(g,h,i)perylene	0.029 U	0.029 U	0.028 U	0.031 U	0.03 U	0.36
Benzo(a)pyrene	0.029 U	0.029 U	0.028 U	0.031 U	0.03 U	0.14
Chrysene	0.029 U	0.029 U	0.075	0.031 U	0.041	0.39
Dibenzo(a,h)anthracene	0.029 U	0.029 U	0.028 U	0.031 U	0.03 U	0.11
Fluoranthene	0.029 U	0.029 U	0.075	0.031 U	0.039	0.33
Fluorene	0.029 U	0.029 U	0.03	0.031 U	0.03 U	0.31
Indeno(1,2,3-cd)pyrene	0.029 U	0.029 U	0.028 U	0.031 U	0.03 U	0.24
Naphthalene	0.029 U	0.029 U	0.11	0.14	0.042	0.03 U
Phenanthrene	0.029 U	0.029 U	0.17	0.076	0.083	0.13
Pyrene	0.029 U	0.029 U	0.13	0.047	0.033	1.2
		PCBs ((mg/kg)			
Aroclor 1016	0.094 U	0.095 U	0.093 U	0.096 U	0.094 U	0.098 U
Aroclor 1221	0.094 U	0.095 U	0.093 U	0.096 U	0.094 U	0.098 U
Aroclor 1232	0.094 U	0.095 U	0.093 U	0.096 U	0.094 U	0.098 U
Aroclor 1242	0.094 U	0.095 U	0.093 U	0.096 U	0.094 U	0.098 U
Aroclor 1248	0.094 U	0.095 U	0.093 U	0.096 U	0.094 U	0.098 U
Aroclor 1254	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U
Aroclor 1260	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U
	Prior	rity Pollutant Metals				
Antimony	1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.2 UJ
Arsenic	12 J	9.6 J	12 J	5.1 J	17 J	7.5 J
Barium	79 J	84 J	31 J	97 J	63 J	100 J
Beryllium	1.1	1.1	0.93	1.2	1	1.3
Cadmium	0.52 U	0.56 U	0.55 U	0.59	0.54 U	0.59 U
Chromium	17 J	17 J	19 Ј	17 J	16 J	21 J
Copper	39 J	28 J	29 J	31 J	55 J	28 J
Lead	21	17	18	17	30	19
Mercury	0.027 U	0.033	0.037	0.046	0.023 U	0.031 U
Nickel	37 J	24 J	31 J	26 J	30 J	33 J
Selenium	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U
Silver	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U
Thallium	1.8	1.7	1.2	1.9	2	2.1
Zinc	40 J	33 J	45 J	54 J	43 J	53 J
Total Cyanide	0.25 U	0.28 U	0.27 U	0.34 U	0.29 U	0.31 U

(2) J - Indicates an estimated value

⁽¹⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit

Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	San	ple Location and De	pth (feet below groun	d surface)/Concentrat	ion
	SP35-002	SP35-003	SP37-002	SP37-003	SP40-002
Compound/Analyte	6-7	12-13	8-9	12-13	7-8
Compound/Intersec		TCL Volatiles (mg/k	g)		
Acetone	0.13	0.042 U	0.082	0.066 J	0.071
Benzene	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
Bromodichloromethane	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
Bromoform	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
Bromomethane	0.023 U	0.017 U	0.02 U	0.023 U	0.02 U
2-Butanone	0.027	0.017 U	0.02 U	0.023 U	0.02 U
Carbon Disulfide	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
Carbon Tetrachloride	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
Chlorobenzene	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
Chloroethane	0.023 U	0.017 U	0.02 U	0.023 U	0.02 U
Chloroform	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
Chloromethane	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
Dibromochloromethane	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
1.1-Dichloroethane	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
1,2-Dichloroethane	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
1.1-Dichloroethene	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
cis-1.2-Dichloroethene	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
trans-1,2-Dichloroethene	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
1,2-Dichloropropane	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
cis-1,3-Dichloropropene	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
trans-1,3-Dichloropropene	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
Ethylbenzene	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
2-Hexanone	0.023 U	0.017 U	0.02 U	0.023 U	0.02 U
4-Methyl-2-Pentanone	0.023 U	0.017 U	0.02 U	0.023 U	0.02 U
Methylene Chloride	0.023 U	0.017 U	0.02 U	0.023 U	0.02 U
Styrene	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
1,1,2,2-Tetrachloroethane	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
Tetrachloroethene	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
Toluene	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
1,1,1-Trichloroethane	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
1,1,2-Trichloroethane	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
Trichloroethene	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
Vinyl Chloride	0.023 U	0.017 U	0.02 U	0.023 U	0.02 U
m,p-Xylene	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U
o-Xylene	0.012 U	0.0084 U	0.0099 U	0.012 U	0.01 U

NOTE:

⁽¹⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit

⁽²⁾ J - Indicates an estimated value

Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Sam	ple Location and De	oth (feet below ground	l surface)/Concentrati	
	SP35-002	SP35-003	SP37-002	SP37-003	SP40-002
Compound/Analyte	6-7	12-13	8-9	12-13	7-8
	TC	L Semivolatiles (mg	/kg)		
Bis(2-chloroethoxy)methane	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
Bis(2-chloroethyl)ether	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
Bis(2-ethylhexyl)phthalate	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
4-Bromophenyl phenyl ether	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
Butyl benzyl phthalate	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
Carbazole	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
4-Chloro-3-methylphenol	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
4-Chloroaniline	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
2-Chloronaphthalene	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
2-Chlorophenol	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
4-Chlorophenyl phenyl ether	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
Dibenzofuran	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
1,2-Dichlorobenzene	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
1,3-Dichlorobenzene	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
1,4-Dichlorobenzene	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
3,3-Dichlorobenzidine	0.79 U	0.77 U	0.77 U	0.75 U	0.77 U
2,4-Dichlorophenol	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
Diethyl phthalate	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
Dimethyl phthalate	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
Di-n-butyl phthalate	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
2,4-Dimethylphenol	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
4,6-Dinitro-2-methylphenol	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U
2,4-Dinitrophenol	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U
2,4-Dinitrotoluene	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
2,6-Dinitrotoluene	0.39 U	0.39 U	0.39 U	0.38 U	0. 3 9 U
Di-n-octyl phthalate	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
Hexachlorobenzene	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
Hexachlorobutadiene	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
Hexachlorocyclopentadiene	0.39 U	0,39 U	0.39 U	0.38 U	0.39 U
Hexachloroethane	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
Isophorone	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
2-Methylnaphthalene	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
2-Methylphenol	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
4-Methylphenol (m/p-cresols)	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
2-Nitroaniline	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U
3-Nitroaniline	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U
4-Nitroaniline	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U
Nitrobenzene	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
2-Nitrophenol	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U
4-Nitrophenol	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U
N-Nitrosodi-n-propylamine	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
N-Nitrosodiphenylamine	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
2,2-Oxybis(1-Chloropropane)	0.017 U	0.016 U	0.016 U	0.016 U	0.016 U
Pentachlorophenol	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U
Phenol	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
1,2,4-Trichlorobenzene	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U
2,4,5-Trichlorophenol	0.79 U	0.77 U	0.77 U	0.75 U	0.77 U
2.4.6-Trichlorophenol	0.39 U	0.39 U	0.39 U	0.38 U	0.39 U

NOTE:

⁽¹⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit

Soil Analytical Results

Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Sam	ple Location and De	pth (feet below ground		on
	SP35-002	SP35-003	SP37-002	SP37-003	SP40-002
Compound/Analyte	6-7	12-13	8-9	12-13	7-8
		PAHs (mg/kg)			
Acenaphthene	0.03 U	0.029 U	0.029 U	0.028 U	0.029 U
Acenaphthylene	0.03 U	0.029 U	0.029 U	0.028 U	0.029 U
Anthracene	0.03 U	0.029 U	0.029 U	0.028 U	0.029 U
Benzo(a)anthracene	0.064	0.029 U	0.029 U	0.028 U	0.029 U
Benzo(b)fluoranthene	0.041	0.029 U	0.029 U	0.028 U	0.029 U
Benzo(k)fluoranthene	0.056	0.029 U	0.029 U	0.028 U	0.029 U
Benzo(g,h,i)perylene	0.037	0.029 U	0.029 U	0.028 U	0.029 U
Benzo(a)pyrene	0.072	0.029 U	0.029 U	0.028 U	0.029 U
Chrysene	0.066	0.029 U	0.029 U	0.028 U	0.029 U
Dibenzo(a,h)anthracene	0.03 U	0.029 U	0.029 U	0.028 U	0.029 U
Fluoranthene	0.074	0.029 U	0.029 U	0.028 U	0.029 U
Fluorene	0.03 U	0.029 U	0.029 U	0.028 U	0.029 U
Indeno(1,2,3-cd)pyrene	0.036	0.029 U	0.029 U	0.028 U	0.029 U
Nanhthalene	0.03 U	0.029 U	0.056	0.028 U	0.029 U
Phenanthrene	0.03 U	0.029 U	0.029 U	0.028 U	0.029 U
Pyrene	0.074	0.029 U	0.029 U	0.028 U	0.029 U
		PCBs (mg/kg)			
Aroclor 1016	0.095 U	0.095 U	0.092 U	0.092 U	0.093 U
Aroclor 1221	0.095 U	0.095 U	0.092 U	0.092 U	0.093 U
Aroclor 1232	0.095 U	0.095 U	0.092 U	0.092 U	0.093 U
Aroclor 1242	0.095 U	0.095 U	0.092 U	0.092 U	0.093 U
Aroclor 1248	0.095 U	0.095 U	0.092 U	0.092 U	0.093 U
Aroclor 1254	0.19 U	0.19 U	0.18 U	0.18 U	0.19 U
Aroclor 1260	0.19 U	0.19 U	0.18 U	0.18 U	0.19 U
	Priority Polluta	ant Metals and Total	Cyanide (mg/kg)		
Antimony	1.1 UJ	1.1 UJ	0.97 UJ	1.2 UJ	1.1 UJ
Arsenic	5.8 J	12 Ј	15 J	7.7 J	10 J
Barium	98 J	89 J	98 J	85 J	88 J
Beryllium	0.83	1.1	1.2	1.1	1.1
Cadmium	0.56 U	0.56 U	0.53	0.59 U	0.56 U
Chromium	11 J	20 J	20 J	19 J	16 J
Copper	11 J	30 J	38 J	25 J	33 J
Lead	36	25	22	17	19
Mercury	0.14	0.024 U	0.026 U	0.029 U	0.029 U
Nickel	12 J	35 J	38 J	25 Ј	36 J
Selenium	1.1 U	1.1 U	0.97 U	1.2 U	1.1 U
Silver	1.1 U	1.1 U	0.97 U	1.2 U	1.1 U
Thallium	2	2.2	2	1.8	2.2
Zinc	40 J	49 J	46 J	37 J	52 J
Total Cyanide	0.29 U	0.24 U	0.25 U	0.31 U	0.32 U

(1) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit

(2) J - Indicates an estimated value

Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Sample	e Location and Depth (feet be	low ground surface)/Concent	ration
	SP40-003	SP43-003	SP44-002	SP44-003
Compound/Analyte	14-15	11-12	6-7	12-13
	TC	L Volatiles (mg/kg)		
Acetone	0.043 U	0.041 U	0.082	0.069 U
Benzene	0.0087 U	0.0083 U	0.0089 U	0.014 U
Bromodichloromethane	0.0087 U	0.0083 U	0.0089 U	0.014 U
Bromoform	0.0087 U	0.0083 U	0.0089 U	0.014 U
Bromomethane	0.017 U	0.017 U	0.018 U	0.028 U
2-Butanone	0.017 U	0.017 U	0.018 U	0.028 U
Carbon Disulfide	0.0087 U	0.0083 U	0.0089 U	0.014 U
Carbon Tetrachloride	0.0087 U	0.0083 U	0.0089 U	0.014 U
Chlorobenzene	0.0087 U	.0.0083 U	0.0089 U	0.014 U
Chloroethane	0.017 U	0.017 U	0.018 U	0.028 U
Chloroform	0.0087 U	0.0083 U	0.0089 U	0.014 U
Chloromethane	0.0087 U	0.0083 U	0.0089 U	0.014 U
Dibromochloromethane	0.0087 U	0.0083 U	0.0089 U	0.014 U
1.1-Dichloroethane	0.0087 U	0.0083 U	0.0089 U	0.014 U
1.2-Dichloroethane	0.0087 U	0.0083 U	0.0089 U	0.014 U
1,1-Dichloroethene	0.0087 U	0.0083 U	0.0089 U	0.014 U
cis-1,2-Dichloroethene	0.0087 U	0.0083 U	0.0089 U	0.014 U
trans-1,2-Dichloroethene	0.0087 U	0.0083 U	0.0089 U	0.014 U
1,2-Dichloropropane	0.0087 U	0.0083 U	0.0089 U	0.014 U
cis-1,3-Dichloropropene	0.0087 U	0.0083 U	0.0089 U	0.014 U
trans-1,3-Dichloropropene	0.0087 U	0.0083 U	0.0089 U	0.014 U
Ethylbenzene	0.0087 U	0.0083 U	0.0089 U	0.014 U
2-Hexanone	0.017 U	0.017 U	0.018 U	0.028 U
4-Methyl-2-Pentanone	0.017 U	0.017 U	0.018 U	0.028 U
Methylene Chloride	0.017 U	0.017 U	0.018 U	0.028 U
Styrene	0.0087 U	0.0083 U	0.0089 U	0.014 U
1,1,2,2-Tetrachloroethane	0.0087 U	0.0083 U	0.0089 U	0.014 U
Tetrachloroethene	0.0087 U	0.0083 U	0.0089 U	0.014 U
Toluene	0.0087 U	0.0083 U	0.0089 U	0.014 U
1,1,1-Trichloroethane	0.0087 U	0.0083 U	0.0089 U	0.014 U
1,1,2-Trichloroethane	0.0087 U	0.0083 U	0.0089 U	0.014 U
Trichloroethene	0.0087 U	0.0083 U	0.0089 U	0.014 U
Vinyl Chloride	0.017 U	0.017 U	0.018 U	0.028 U
m,p-Xylene	0.0087 U	0.0083 U	0.0089 U	0.014 U
o-Xylene	0.0087 U	0.0083 U	0.0089 U	0.014 U

NOTE:

(1) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit

Soil Analytical Results

Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Sample I	ocation and Depth (feet bel	low ground surface)/Concent	
	SP40-003	SP43-003	SP44-002	SP44-003
Compound/Analyte	14-15	11-12	6-7	12-13
	TCL Se	emivolatiles (mg/kg)		
is(2-chloroethoxy)methane	0.39 U	0. 3 9 U	0.4 U	0.39 U
is(2-chloroethyl)ether	0.39 U	0.39 U	0.4 U	0.39 U
is(2-ethylhexyl)phthalate	0.39 U	0.39 U	0.4 U	0.39 U
-Bromophenyl phenyl ether	0.39 U	0.39 U	0.4 U	0.39 U
Butyl benzyl phthalate	0.39 U	0.39 U	0.4 U	0.39 U
arbazole	0.39 U	0.39 U	0.4 U	0.39 U
-Chloro-3-methylphenol	0.39 U	0.39 U	0.4 U	0.39 U
-Chloroaniline	0.39 U	0.39 U	0.4 U	0.39 U
-Chloronaphthalene	0.39 U	0.39 U	0.4 U	0.39 U
-Chlorophenol	0.39 U	0.39 U	0.4 U	0.39 U
-Chlorophenyl phenyl ether	0.39 U	0.39 U	0.4 U	0.39 U
Dibenzofuran	0.39 U	0.39 U	0.4 U	0.39 U
,2-Dichlorobenzene	0.39 U	0.39 U	0.4 U	0.39 U
,3-Dichlorobenzene	0.39 U	0.39 U	0.4 U	0.39 U
,4-Dichlorobenzene	0.39 U	0.39 U	0.4 U	0.39 U
,3-Dichlorobenzidine	0.77 U	0.78 U	0.79 U	0.77 U
,4-Dichlorophenol	0.39 U	0.39 U	0.4 U	0.39 U
Diethyl phthalate	0.39 U	0.39 U	0.4 U	0.39 U
Dimethyl phthalate	0.39 U	0.39 U	0.4 U	0.39 U
Di-n-butyl phthalate	0.39 U	0.39 U	0.4 U	0.39 U
,4-Dimethylphenol	0.39 U	0.39 U	0.4 U	0.39 U
,6-Dinitro-2-methylphenol	1.9 U	1.9 U	1.9 U	1.9 U
,4-Dinitrophenol	1.9 U	1.9 U	1.9 U	1.9 U
.4-Dinitrotoluene	0.39 U	0.39 U	0.4 U	0.39 U
.6-Dinitrotoluene	0.39 U	0.39 U	0.4 U	0.39 U
Di-n-octyl phthalate	0.39 U	0.39 U	0.4 U	0.39 U
Iexachlorobenzene	0.39 U	0.39 U	0.4 U	0.39 U
Hexachlorobutadiene	0.39 U	0.39 U	0.4 U	0.39 U
Hexachlorocyclopentadiene	0.39 U	0.39 U	0.4 U	0.39 U
Iexachloroethane	0.39 U	0.39 U	0.4 U	0.39 U
sophorone	0.39 U	0.39 U	0.4 U	0.39 U
2-Methylnaphthalene	0.39 U	0.39 U	0.4 U	0.39 U
2-Methylphenol	0.39 U	0.39 U	0.4 U	0.39 U
4-Methylphenol (m/p-cresols)	0.39 U	0.39 U	0.4 U	0.39 U
-Nitroaniline	1.9 U	1.9 U	1.9 U	1.9 U
-Nitroaniline	1.9 U	1.9 U	1.9 U	1.9 U
-Nitroaniline	1.9 U	1.9 U	1.9 U	1.9 U
Vitrobenzene	0.39 U	0.39 U	0.4 U	0.39 U
-Nitrophenol	1.9 U	1.9 U	1.9 U	1.9 U
-Nitrophenol	1.9 U	1.9 U	1.9 U	1.9 U
I-Nitrosodi-n-propylamine	0.39 U	0.39 U	0.4 U	0.39 U
N-Nitrosodiphenylamine	0.39 U	0.39 U	0.4 U	0.39 U
2,2-Oxybis(1-Chloropropane)	0.016 U	0.016 U	0.017 U	0.016 U
Pentachlorophenol	1.9 U	1.9 U	1.9 U	1.9 U
Phenol	0.39 U	0.39 U	0.4 U	0.39 U
,2,4-Trichlorobenzene	0.39 U	0.39 U	0.4 U	0.39 U
2,4,5-Trichlorophenol	0.77 U	0.78 U	0.79 U	0.77 U
2,4,6-Trichlorophenol	0.39 U	0.39 U	0.4 U	0.39 U

(1) U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit

Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

2000	Sample I	ocation and Depth (feet be	low ground surface)/Concentr	ration
	SP40-003	SP43-003	SP44-002	SP44-003
Compound/Analyte	14-15	11-12	6-7	12-13
Compound/indiye		AHs (mg/kg)		
Acenaphthene	0.029 U	0.029 U	0.03 U	0.029 U
Acenaphthylene	0.029 U	0.029 U	0.03 U	0.029 U
Anthracene	0.029 U	0.029 U	0.03 U	0.029 U
Benzo(a)anthracene	0.029 U	0.029 U	0.03 U	0.029 U
Benzo(b)fluoranthene	0.029 U	0.029 U	0.03 U	0.029 U
Benzo(k)fluoranthene	0.029 U	0.029 U	0.03 U	0.029 U
Benzo(g,h,i)perylene	0.029 U	0.029 U	0.03 U	0.029 U
Benzo(a)pyrene	0.029 U	0.029 U	0.03 U	0.029 U
Chrysene	0.029 U	0.029 U	0.03 U	0.029 U
Dibenzo(a,h)anthracene	0.029 U	0.029 U	0.03 U	0.029 U
Fluoranthene	0.029 U	0.029 U	0.03 U	0.029 U
Fluoranmene	0.029 U	0.029 U	0.03 U	0.029 U
	0.029 U	0.029 U	0.03 U	0.029 U
Indeno(1,2,3-cd)pyrene Naphthalene	0.029 U	0.029 U	0.03 U	0.029 U
Phenanthrene	0.029 U	0.029 U	0.03 U	0.029 U
	0.029 U	0.029 U	0.03 U	0.029 U
Pyrene	<u> </u>	PCBs (mg/kg)		
1 1016	0.094 U	0.097 U	0.096 U	0.093 U
Aroclor 1016	0.094 U	0.097 U	0.096 U	0.093 U
Aroclor 1221	0.094 U	0.097 U	0.096 U	0.093 U
Aroclor 1232	0.094 U	0.097 U	0.096 U	0.093 U
Aroclor 1242	0.094 U	0.097 U	0.096 U	0.093 U
Aroclor 1248	0.094 U	0.19 U	0.19 U	0.19 U
Aroclor 1254	0.19 U	0.19 U	0.19 U	0.19 U
Aroclor 1260		fetals and Total Cyanide (r		
	1 UJ	1 UJ	1.1 UJ	1.2 UJ
Antimony	8,3 J	9 J	13 J	9.3 J
Arsenic	87 J	91 J	79 J	94 J
Barium	1.1	1.1	1.2	1.2
Beryllium	0.52 U	0.5 U	0.57 U	0.58 U
Cadmium	0.32 U	21 J	20 J	20 J
Chromium	28 J	30 J	31 J	33 J
Copper	17	19	19	20
Lead		0.03 U	0.03 U	0.026 U
Mercury	0.028 U	33 J	39 J	35 J
Nickel	28 J	1 U	1.1 Ŭ	1.2 U
Selenium	1 U	1 U	1.1 U	1.2 U
Silver	1 U	1.9	1.8	2.3
Thallium	1.9	1.9 46 J	52 J	45 J
Zinc	45 J		0.32 U	0.31 U
Total Cyanide	0.27 U	0.27 U	0.32 0	0.51 0

⁽¹⁾ U - Indicates compound/analyte was analyzed for but not detected; the associated value is the sample reporting limit. (2) J - Indicates an estimated value.

Table 3

Occurrence, Distribution and Selection of Chemicals of Potential Concern Post-Remediation Resident 1 and Utility Worker The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Surface/Subsurface soil*

Exposure Pomt: Surface/Subsurface soil*

CAS Number	Chemical	Minimum (2) Concentration	Minimum Qualifier	Maximum (2) Concentration	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening	Back- ground Value	Screening Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flug	Rationale for (3) Contaminant Deletion or Selection
67-64-1	Acetone	0.071	J	0.32		mg/kg	SP03-002	9 / 11	0.041 - 0.064						YES	FD
71-43-2	Benzene	0.015		0.015		mg/kg	SP02-002	1 / 11	0.0082 - 0.017						YES	FD
75-27-4	Bromodichloromethane					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
75-25-2	Bromoform					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
74-83-9	Bromomethane			W		mg/kg		0 / 11	0.016 - 0.034						NO	ND
78-93-3	2-Butanone	0.02		0.072		mg/kg	SP03-002	4 / 11	0.016 - 0.026						YES	FD
75-15-0	Carbon Disulfide					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
56-23-5	Carbon Tetrachloride					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
108-90-7	Chlorobenzene					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
75-00-3	Chloroethane			***		mg/kg		0 / 11	0.016 - 0.034						NO	ND
67-66-3	Chloroform					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
74-87-3	Chloromethane					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
124-48-1	Dibromochloromethane					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
75-34-3	1,1-Dichloroethane		W			mg/kg		0 / 11	0.0081 - 0.017						NO	ND
107-06-2	1,2-Dichloroethane					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
75-35-4	1,1-Dichloroethene					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
156-59-2	cis-1,2-Dichloroethene					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
156-60-5	trans-1,2-Dichloroethene					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
78-87-5	1,2-Dichloropropane					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
1006-01-5	cis-1,3-Dichloropropene					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
10061-02-6	trans-1,3-Dichloropropene					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
100-41-4	Ethylbenzene	0.049		0.049		mg/kg	SP02-002	+ / 11	0.0082 - 0.017						YES	FD
591-78-6	2-Hexanone					mg/kg		0 / 11	0.016 - 0.034						NO	ND
75-09-2	4-Methyl-2-Pentanone					mg/kg		0 / 11	0.016 - 0.034						NO	ND
75-09-2	Methylene Chloride	,				mg/kg		0 / 11	0.016 - 0.034						NO	ND

Notes

(1) * For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

(2) Minimum/maximum detected concentration.

(3) Rationale Codes Selection Reason: Frequent Detection (FD)
Deletion Reason: Not Detected (ND)

Definitions: ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

COPC = Chemical of Potential Concern

J = Estimated value

${\bf Occurrence, Distribution \ and \ Selection \ of \ Chemicals \ of \ Potential \ Concern}$

Post-Remediation Resident 1 and Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Surface/Subsurface soil*

Exposure Point: Surface/Subsurface soil*

CAS Number	Chemical	Minimum (2) Concentration	Minimum Qualifier	Maximum (2) Concentration	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening	Back- ground Value	Screening Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for (3) Contaminant Deletion or Selection
100-42-5	Styrene					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
79-34-5	1,1,2,2-Tetrachloroethane					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
127-18-4	Tetrachloroethene					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
108-88-3	Toluene					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
71-55-6	1,1,1-Trichloroethane					mg/kg		0 / 11	0.0081 - 0.017	<u> </u>					NO	ND
79-00-5	1,1,2-Trichloroethane					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
79-01-6	Trichloroethene					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
75-01-4	Vinyl Chloride					mg/kg		0 / 11	0.016 - 0.034						NO	ND
108-38-3,	m,p-Xylene					mg/kg		0 / 11	0.0081 - 0.017						NO	ND
95-47-6	o-Xylene	0.012		0.025		mg/kg	SB33-002	2 / 11	0.0082 - 0.017						YES	FD
111-91-1	Bis(2-chloroethoxy)methane					mg/kg		0 / 11	0.37 - 0.44						NO	ND
111-44-4	Bis(2-chloroethyl)ether					mg/kg		0 / 11	0.37 - 0.44						NO	ND
117-81-7	Bis(2-ethylhexyl)phthalate	0.45		0.45		mg/kg	SB01-002	1 / 11	0.37 - 0.44						YES	FD
101-55-3	4-Bromophenyi phenyl ether					mg/kg		0 / 11	0.37 - 0.44		ļ				NO	ND
85-68-7	Butyl benzyl phthalate		wiran.			mg/kg		0 / 11	0.37 - 0.44			ļ.,			NO	ND
86-74-8	Carbazole	0.47		0.47		mg/kg	SB02-002	+ / 11	0.37 - 0.44						YES	FD
106-47-8	4-Chloro-3-methylphenol					mg/kg		0 / 11	0.37 - 0.44		ļ				NO	ND
35421-08-0	4-Chloroaniline					mg/kg		0 / 11	0.37 - 0.44			<u> </u>		ļ	NO	ND
91-58-7	2-Chloronaphthalene					mg/kg		0 / 11	0.37 - 0.44						NO	ND
95-57-8	2-Chlorophenol					ıng/kg		0 / 11	0.37 - 0.44						NO	ND
7005-72-3	4-Chlorophenyl phenyl ether					mg/kg		0 / 11	0.37 - 0.44			ļ			NO	ND
132-64-9	Dibenzofuran					mg/kg		0 / 11	0.37 - 0.44						NO	ND
95-50-1	1,2-Dichlorobenzene					mg/kg		0 / 11	0.37 - 0.44			ļ			NO	ND
541-73-1	1,3-Dichlorobenzene		1400			mg/kg		0 / 11	0.37 - 0.44						NO	ND
106-46-7	1,4-Dichlorobenzene					mg/kg		0 / 11	0.37 - 0.44						NO	ND

Notes

(1) * For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

(2) Minimum/maximum detected concentration.

(3) Rationale Codes Selection Reason: Frequent Detection (FD)
Deletion Reason: Not Detected (ND)

Definitions: ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered COPC = Chemical of Potential Concern

Occurrence, Distribution and Selection of Chemicals of Potential Concern Post-Remediation Resident 1 and Utility Worker The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Surface/Subsurface soil*

Exposure Point: Surface/Subsurface soil*

CAS Number	Chemical	Minimum (2) Concentration	Minunum Qualifier	Maximum (2) Concentration	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening	Back- ground Value	Screening Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for (3) Contaminant Deletion or Selection
91-94- i	3,3'-Dichlorobenzidine	<u> </u>		•		mg/kg		0 / 11	0.74 - 0.89						NO	ND
120-83-2	2,4-Dichlorophenol		100			mg/kg		0 / 11	0.37 - 0.44						NO	ND
84-66-2	Diethyl phthalate					mg/kg		0 / 11	0.37 - 0.44						NO	ND
84-74-2	Dimethyl phthalate					mg/kg		0 / 11	0.37 - 0.44						NO	ND
105-67-9	Di-n-butyl phthalate			*****	,	mg/kg		0 / 11	0.37 - 0.44						NO	ND
131-11-3	2,4-Dimethylphenot					mg/kg		0 / 11	0.37 - 0.44						NO	ND
534-52-1	4,6-Dinitro-2-methylphenol			***************************************		mg/kg		0 / 11	1.8 - 2.1						NO	ND
51-28-5	2,4-Dinitrophenol	Man.				mg/kg		0 / 11	1.8 - 2.1						NO	ND
121-14-2	2.4-Dinitrotoluene					mg/kg		0 / 11	0.37 - 0.44						NO	ND
606-20-2	2.6-Dintrotoluene					mg/kg		0 / 11	0.37 - 0.44						NO	ND
117-84-0	Di-n-octyl phthalate	A. P. P. P. P. P. P. P. P. P. P. P. P. P.				mg/kg		0 / 11	0.37 - 0.44						NO	ND
118-74-i	Hexachlorobenzene		2/11/	*****		mg/kg		0 / 11	0.37 - 0.44						NO	ND
87-68-3	Hexachlorobutadiene					mg/kg		0 / 11	0.37 - 0.44						NO	ND
77-47-4	Hexachlorocyclopentadiene	1				mg/kg		0 / 11	0.37 - 0.44						NO	ND
67-72-1	Hexachloroethane		Limber			mg/kg		0 / 11	0.37 - 0.44						NO	ND
78-59-i	Isophorone					mg/kg		0 / 11	0.37 - 0.44						NO	ND
91-57-6	2-Methylnaphthalene					mg/kg	3004	0 / 11	0.37 - 0.44						NO	ND
95-48-7	2-Methylphenol					mg/kg		0 / 11	0.37 - 0.44						NO	ND
61379-65-5	4-Methylphenol (m/p-cresols)					mg/kg		0 / 11	0.37 - 0.44						NO	ND
88-74-4	2-Nitroaniline		1,000			mg/kg		0 / 11	1.8 - 2.1						NO	ND
99-09-2	3-Nitroaniline					mg/kg		0 / 11	1.8 - 2.1						NO	ND
100-01-6	4-Nitroaniline					mg/kg		0 / 11	1.8 - 2.1						NO	ND
98-95-3	Nitrobenzene					mg/kg		0 / 11	0.37 - 0.44						NO	ND
88-75-5	2-Nitrophenol				***	mg/kg		0 / 11	1.8 - 2.1						NO	ND
100-02-7	4-Nitrophenol					mg/kg		0 / 11	1.8 - 2.1						NO	ND

Notes:

(1) * For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

(2) Minimum/maximum detected concentration.

(3) Rationale Codes Selection Reason: Frequent Detection (FD)

Deletion Reason: Not Detected (ND)

Definitions: ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered COPC = Chemical of Potential Concern

Former Willow Street Station - RA

November 2005

Occurrence, Distribution and Selection of Chemicals of Potential Concern

Post-Remediation Resident 1 and Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Surface/Subsurface soil*

Exposure Point: Surface/Subsurface soil*

CAS Number	Chemical	Minimum (2) Concentration	Minımum Qualifier	Maximum (2) Concentration	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening	Back- ground Value	Screening Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for (3) Contaminant Deletion or Selection
621-64-7	N-Nitrosodi-n-propylamine					mg/kg		0 / 11	0.37 - 0.44						NO	ND
86-30-6	N-Nitrosodiphenylamine					mg/kg		0 / 11	0.37 - 0.44						NO	ND
108-60-1	2, 2'-Oxybis(1-Chloropropane)					mg/kg		0 / 11	0.016 - 0.019						NO	ND
108-60-1	Pentachlorophenot					mg/kg		0 / 11	1.8 - 2.1						NO	ND
87-86-5	Phenol					mg/kg		0 / 11	0.37 - 0.44						NO	ND
120-82-1	1,2,4-Trichlorobenzene					mg/kg		0 / 11	0.37 - 0.44						NO	ND
95-95-4	2,4,5-Trichlorophenol					mg/kg		0 / 11	0.74 - 0.89						NO	ND
88-06-2	2,4,6-Trichlorophenot					mg/kg		0 / 11	0.37 - 0.44						NO	ND
83-32-9	Acenaphthene	0.12		0.19		mg/kg	SP02-002	2 / 11	0.028 - 0.034						YES	FD
208-96-8	Acenaphthylene	0.029		0.13		mg/kg	SP02-002	3 / 11	0.029 - 0.034						YES	FD
120-12-7	Anthracene	0.047		0.3		mg/kg	SP02-002	4 / 11	0.029 - 0.034						YES	FD
56-55-3	Benzo(a)anthracene	0.064		0.43		mg/kg	SP02-002	4 / 11	0.028 - 0.034						YES	FD
207-08-9	Benzo(b)fluoranthene	0.041		0.36		mg/kg	SP02-002	4 / 11	0.028 - 0.034						YES	FD
50-32-8	Benzo(k)fluorunthene	0.056		0.39		mg/kg	SP02-002	4 / 11	0.028 - 0.034						YES	FD
191-24-2	Benzo(g,h,i)perylene	0.037		0.48		mg/kg	SP02-002	4 / 11	0.028 - 0.034			<u> </u>			YES	FD
205-99-2	Benzo(a)pyrene	0.072		0.52		mg/kg	SP02-002	4 / 11	0.028 - 0.034						YES	FD
218-01-9	Chrysene	0.066		0.67		mg/kg	SB01-002	5 / 11	0.029 - 0.034						YES	FD
53-70-3	Dibenzo(a,h)anthracene	0.099		0.13		mg/kg	SP02-002	3 / 11	0.028 - 0.034						YES	FD
206-44-0	Fluoranthene	0.074		1.1		mg/kg	SB01-002	5 / 11	0.029 - 0.034						YES	FD
86-73-7	Fluorene	0.03		0.31		mg/kg	SP34-002	3 / 11	0.029 - 0.034						YES	FD
193-39-5	Indeno(1,2,3-cd)pyrene	0.036		0.35		mg/kg	SP02-002	4 / 11	0.028 - 0.034		ļ				YES	FD
91-20-3	Naphthalene	0.044		0.28		mg/kg	SP02-002	5 / 11	0.029 - 0.034						YES	FD
85-01-8	Phenanthrene	0.076		1		mg/kg	SP02-002	5 / 11	0.029 - 0.034						YES	FD
129-00-0	Pyrene	0.047		1.2		mg/kg	SB01-002	6 / 11	0.029 - 0.034						YES	FD

Notes:

(1) * For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

(2) Minimum/maximum detected concentration

(3) Rationale Codes Selection Reason: Frequent Detection (FD)

Deletion Reason: Not Detected (ND)

Definitions: ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

COPC = Chemical of Potential Concern

Occurrence, Distribution and Selection of Chemicals of Potential Concern

Post-Remediation Resident 1 and Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Surface/Subsurface soil*

Exposure Point: Surface/Subsurface soil*

CAS Number	Chemical	Minimum (2) Concentration	Minimum Qualifier	Maximum (2) Concentration	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening	Back- ground Value (3)	Screening Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for (4) Contaminant Deletion or Selection
1267-41-12	Aroclor 1016					mg/kg		0 / 11	0.09 - 0.1						NO	ND
1110-42-82	Aroclor 1221					mg/kg		0 / 11	0.09 - 0.1						NO	ND
1114-11-65	Arocior 1232					mg/kg		0 / 11	0.09 - 0.1						NO	ND
5346-92-19	Aroclor 1242					mg/kg		0 / 11	0.09 - 0.1						NO	ND
1267-22-96	Aroclor 1248					mg/kg		0 / 11	0.09 - 0.1						NO	ND
1109-76-91	Aroclor 1254		,,,,			mg/kg		0 / 11	0.18 - 0.2						NO	ND
1109-69-25	Aroclor 1260					mg/kg		0 / 11	0.18 - 0.2						NO	ND
7440-36-0	Antimony					mg/kg		0 / 11	0.97 - 1.2						NO	ND
7440-38-2	Arsenic	2.5		15	J	mg/kg	SP37-002	11 / 11	0.49 - 0.63		13.0				YES	FD/ASL
7440-39-3	Barium	19		100	J	mg/kg	SP34-002	11 / 11	0.97 - 1.3		110				NO	BSL
7440-41-7	Beryllium	0.63		1.3		mg/kg	SP03-002	11 / 11	0.52 - 1.3		0.59				YES	FD/ASL
7440-43-9	Cadmium	0.53		0.59		mg/kg	SB33-002	3 / 11	0.52 - 0.6		0.6				NO	BSL
7440-47-3	Chromium	6.9		21	J	mg/kg	SP34-002	11 / 11	0.97 - 1.3		16.2				YES	FD/ASL
7440-50-8	Copper	8.9		39	J	mg/kg	SP16-002	11 / 11	0.97 - 1.3		19.6				YES	FD/ASL
7439-92-i	Lead	17		41		mg/kg	SB01-002	11 / 11	0.49 - 1.2		36.0				YES	FD/ASL
7439-97-6	Mercury	0.035		0.28		mg/kg	SB01-002	5 / 11	0.026 - 0.031	ļ	0.06				YES	FD/ASL
7440-02-0	Nickel	5.5		39	J	mg/kg	SP44-002	11 / 11	0.97 - 1.3		18.0				YES	FD/ASL
7782-49-2	Selenium					mg/kg		0 / 11	0.97 - 1.2		0.48				NO	ND
7440-22-4	Silver					mg/kg		0 / 11	0.97 - 1.2		0.55				NO	ND
7440-28-0	Thallium	1.2		4.2		mg/kg	SB01-002	10 / 11	1 - 1		0.32				YES	FD/ASL
7440-66-6	Zinc	23		70	J	mg/kg	SB38-001	11 / 11	4.9 - 6.3		95.0				NO	BSL
57-12-5	Total Cyanide					mg/kg		0 / 11	0.25 - 0.34		0.51				NO	ND

Notes:

(1) * For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

(2) Minimum/maximum detected concentration.

(3) Metropolitan Stastical Areas (MSA) background values for metals were obtained from Illinois Tiered Approach to Corrective

Action Objectives (TACO) (IAC 2002).
(4) Rationale Codes

Selection Reason: Frequent Detection (FD)

Above Screening Level (ASL)

Detetion Reason:

Not Detected (ND)

Below Screening Level (BSL)

Definitions:

ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

COPC = Chemical of Potential Concern

J = Estimated value

Table 4

Occurrence, Distribution and Selection of Chemicals of Potential Concern Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Surface/Subsurface soil*

Exposure Point: Surface/Subsurface soil*

CAS Number	Chemical	Minimum (2) Concentration	Minimum Qualifier	Maximum (2) Concentration	1	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening	Back- Ground Value	Screening Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for (3) Contaminant Deletion or Selection
67-64-1	Acetone	0.066	J	0.32		mg/kg	SP03-002	11 / 21	0.041 - 0.069						YES	FD
71-43-2	Benzene	0.015		0.015		mg/kg	SP02-002	1 / 21	0.0082 - 0.017						YES	FD
75-27-4	Bromodichloromethane					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
75-25-2	Bromoform					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
74-83-9	Bromomethane					mg/kg		0 / 21	0.016 - 0.034						NO	ND
78-93-3	2-Butanone	0.02		0.072		mg/kg	SP03-002	4 / 21	0.016 - 0.034						YES	FD
75-15-0	Carbon disulfide					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
56-23-5	Carbon tetrachloride					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
108-90-7	Chlorobenzene					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
75-00-3	Chloroethane					mg/kg		0 / 21	0.016 - 0.034						NO	ND
67-66-3	Chloroform					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
74-87-3	Chloromethane					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
124-48-1	Dibromochloromethane					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
75-34-3	1,1-Dichloroethane					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
107-06-2	1,2-Dichloroethane					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
75-35-4	1,1-Dichloroethene					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
156-59-2	cis-1,2-Dichloroethene					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
156-60-5	trans-1,2-Dichloroethene					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
78-87-5	1,2-Dichloropropane					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
1006-01-5	cis-1,3-Dichloropropene					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
10061-02-6	trans-1,3-Dichloropropene					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
100-41-4	Ethylbenzene	0.049		0.049		mg/kg	SP02-002	ı / 21	0.0082 - 0.017						NO	IFD
591-78-6	2-Hexanone					mg/kg		0 / 21	0.016 - 0.034						NO	ND
75-09-2	4-Methyl-2-pentanone					mg/kg		0 / 21	0.016 - 0.034						NO	ND

NOTES:

(1) * For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

(2) Minimum/maximum detected concentration.

(3) Rationale Codes Selection Reason:

n Reason: Frequent Detection (FD)

Deletion Reason: Infrequent Detection (IFD) = FD < 0.05 (USEPA 1989)

Non Detect Data (ND)

Definitions: ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

COPC = Chemical of Potential Concern

J = Estimated Value

Occurrence, Distribution and Selection of Chemicals of Potential Concern Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future Medium: Soil

Exposure Medium: Surface/Subsurface soil*

Exposure Point: Surface/Subsurface soil*

CAS Number	Chemical	Minimum (2) Concentration	ł	Maximum (2) Concentration	1	1	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening	Back- Ground Value	Screening Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for (3) Contaminant Deletion or Selection
75-09-2	Methylene chloride					mg/kg		0 / 21	0.016 - 0.034						NO	ND
100-42-5	Styrene					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
79-34-5	1,1,2,2-Tetrachloroethane					mg/kg	•	0 / 21	0.0081 - 0.017						NO	ND
127-18-4	Tetrachloroethene	-				mg/kg		0 / 21	0.0081 - 0.017						NO	ND
108-88-3	Toluene					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
71-55-6	1,1,1-Trichloroethane					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
79-00-5	1,1,2-Trichloroethane					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
79-01-6	Trichloroethene					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
1330-20-7	Vinyl Chloride					mg/kg		0 / 21	0.016 - 0.034						NO	ND
1330-20-7	m,p-Xylene					mg/kg		0 / 21	0.0081 - 0.017						NO	ND
95-47-6	o-Xylene	0.012		0.025		mg/kg	SB33-002	2 / 21	0.0082 - 0.017						YES	FD
111-91-1	Bis(2-chloroethoxy)methane					mg/kg		0 / 21	0.37 - 0.44						NO	ND
111-44-4	Bis(2-chloroethyl)ether					mg/kg		0 / 21	0.37 - 0.44						NO	ND
117-81-7	Bis(2-ethylhexyl)phthalate	0.45		0.45		mg/kg	SB01-002	i / 21	0.37 - 0.44						NO	IFD
101-55-3	4-Bromophenyi-phenyi ether					mg/kg		0 / 21	0.37 - 0.44						NO	ND
85-68-7	Butyl benzyl phthalate					mg/kg		0 / 21	0.37 - 0.44						NO	ND
86-74-8	Carbazole	0.47		0.47		mg/kg	SP02-002	i / 21	0.37 - 0.44						NO	IFD
106-47-8	4-Chloro-3-methylphenol					mg/kg		0 / 21	0.37 - 0.44						NO	ND
35421-08-0	4-Chloroaniline					mg/kg		0 / 21	0.37 - 0.44						NO	ND
91-58-7	2-Chloronaphthalene					mg/kg		0 / 21	0.37 - 0.44						NO	ND ND
95-57-8	2-Chlorophenoi					mg/kg		0 / 21	0.37 - 0.44						NO	ND
7005-72-3	4-Chlorophenyi-phenyi ether					mg/kg		0 / 21	0.37 - 0.44						NO	ND
132-64-9	Dibenzofuran					mg/kg		0 / 21	0.37 - 0.44						NO	ND
95-50-1	1,2-Dichlorobenzene			***		mg/kg		0 / 21	0.37 - 0.44						NO	ND
541-73-1	1,3-Dichlorobenzene				****	mg/kg		0 / 21	0.37 - 0.44						NO	ND
106-46-7	1,4-Dichlorobenzene					mg/kg		0 / 21	0.37 - 0.44						NO	ND

NOTES:

(1) * For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

(2) Minimum/maximum detected concentration.

(3) Rationale Codes Selection Reason:

Frequent Detection (FD)

Deletion Reason:

Infrequent Detection (IFD) = FD < 0.05 (USEPA 1989)

Non Detect Data (ND)

COPC = Chemical of Potential Concern

ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

Definitions:

Occurrence, Distribution and Selection of Chemicals of Potential Concern Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Surface/Subsurface soil*

Exposure Point: Surface/Subsurface soil*

CAS Number	Chemical	Minimum (2) Concentration	Minimum Qualifier	Maximum (2) Concentration		Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening	Back- Ground Value	Screening Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for (3) Contaminant Deletion or Selection
91-94-1	3,3-Dichlorobenzidine	.1				mg/kg		0 / 21	0.74 - 0.89						NO	ND
120-83-2	2,4-Dichlorophenol					mg/kg		0 / 21	0.37 - 0.44						NO	ND
84-66-2	Diethyl phthalate					mg/kg		0 / 21	0.37 - 0.44						NO	ND
84-74-2	Dimethyl phthalate					mg/kg		0 / 21	0.37 - 0.44						NO	ND
105-67-9	Di-n-butyl phthalate					mg/kg		0 / 21	0.37 - 0.44						NO	ND
131-11-3	2,4-Dimethylphenol				***************************************	mg/kg		0 / 21	0.37 - 0.44						NO	ND
534-52-1	4,6-Dinitro-2-methylphenol					mg/kg		0 / 21	1.8 - 2.1						NO	ND
51-28-5	2,4-Dinitrophenol					mg/kg		0 / 21	1.8 - 2.1						NO	ND
121-14-2	2,4-Dinitrotoluene					mg/kg		0 / 21	0.37 - 0.44						NO	ND
606-20-2	2,6-Dinitrotoluene					mg/kg		0 / 21	0.37 - 0.44						NO	ND
117-84-0	Di-n-octyl phthalate					mg/kg		0 / 21	0.37 - 0.44						NO	ND
118-74-1	Hexachlorobenzene					mg/kg		0 / 21	0.37 - 0.44						NO	ND
87-68-3	Hexachlorobutadiene					mg/kg		0 / 21	0.37 - 0.44		<u> </u>				NO	ND
77-47-4	Hexachlorocyclopentadiene					mg/kg		0 / 21	0.37 - 0.44						NO	ND
67-72-1	Hexachloroethane					mg/kg		0 / 21	0.37 - 0.44						NO	ND
78-59-1	Isophorone					mg/kg		0 / 21	0.37 - 0.44						NO	ND
91-57-6	2-Methylnaphthalene	0.79		0.79		mg/kg	SP13-003	i / 21	0.37 - 0.44						NO	IFD
95-48-7	2-Methylphenol					mg/kg		0 / 21	0.37 - 0.44		<u> </u>				NO	ND
61379-65-5	4-Methylphenol (m/p-cresols)					mg/kg		0 / 21	0.37 - 0.44						NO	ND
88-74-4	2-Nitroaniline		***************************************			mg/kg		0 / 21	1.8 - 2.1						NO	ND
99-09-2	3-Nitroaniline					mg/kg		0 / 21	1.8 - 2.1						NO	ND
100-01-6	4-Nitroaniline					mg/kg		0 / 21	1.8 - 2.1						NO	ND
98-95-3	Nitrobenzene					mg/kg		0 / 21	0.37 - 0.44						NO	ND
88-75-5	2-Nitrophenol					mg/kg		0 / 21	1.8 - 2.1						NO	ND
100-02-7	4-Nitrophenol					mg/kg		0 / 21	1.8 - 2.1						NO	ND

NOTES:

(1) * For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

(2) Minimum/maximum detected concentration.

(3) Rationale Codes Selection Reason:

Frequent Detection (FD)

Deletion Reason:

Infrequent Detection (IFD) = FD < 0.05 (USEPA 1989)

Non Detect Data (ND)

Definitions:

ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

COPC = Chemical of Potential Concern

Occurrence, Distribution and Selection of Chemicals of Potential Concern Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future Medium: Soil

Exposure Medium: Surface/Subsurface soil*

Exposure Point: Surface/Subsurface soil*

Chamical Minimum (2) Minimum

CAS Number	Chemical	Minimum (2) Concentration	Minimum Qualifier	Maximum (2) Concentration	 Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening	Back- Ground Value	Screening Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for (3) Contaminant Deletion or Selection
621-64-7	N-Nitroso-di-n-propylamine				mg/kg		0 / 21	0.37 - 0.44						NO	ND
86-30-6	N-Nitrosodiphenylamine				mg/kg		0 / 21	0.37 - 0.44						NO	ND
540-54-5	2,2-Oxybis(1-Chloropropane)				mg/kg		0 / 21	0.016 - 0.019						NO	ND
108-60-1	Pentachlorophenoi				 mg/kg		0 / 21	1.8 - 2.1						NO	ND
87-86-5	Phenoi				mg/kg		0 /-21	0.37 - 0.44						NO	ND
120-82-1	1,2,4-Trichlorobenzene				mg/kg		0 / 21	0.37 - 0.44						NO	ND
95-95-4	2,4,5-Trichlorophenol				 mg/kg		0 / 21	0.74 - 0.89						NO	ND
88-06-2	2,4,6-Trichlorophenoi				 mg/kg		0 / 21	0.37 - 0.44						NO	ND
83-32-9	Acenaphthene	0.077		0.19	mg/kg	SP02-002	3 / 21	0.028 - 0.034						YES	FD
208-96-8	Acenaphthylene	0.029		0.13	mg/kg	SP02-002	3 / 21	0.028 - 0.034						YES	FD
120-12-7	Anthracene	0.047		0.3	mg/kg	SP02-002	4 / 21	0.028 - 0.034						YES	FD
56-55-3	Benzo(a)anthracene	0.064		0.43	 mg/kg	SP02-002	4 / 21	0.028 - 0.034						YES	FD
207-08-9	Benzo(b)fluoranthene	0.041		0.36	mg/kg	SP02-002	4 / 21	0.028 - 0.034						YES	FD
50-32-8	Benzo(k)fluoranthene	0.056		0.39	 mg/kg	SP02-002	4 / 21	0.028 - 0.034						YES	FD
191-24-2	Benzo(g,n,i)perylene	0.037		0.48	mg/kg	SP02-002	4 / 21	0.028 - 0.034						YES	FD
205-99-2	Benzo(a)pyrene	0.072		0.52	mg/kg	SP02-002	4 / 21	0.028 - 0.034	-					YES	FD
218-01-9	Chrysene	0.041		0.67	 mg/kg	SB01-002	6 / 21	0.028 - 0.034						YES	FD
53-70-3	Dibenzo(a,h)anthracene	0.099		0.13	mg/kg	SP02-002	3 / 21	0.028 - 0.034						YES	FD
206-44-0	Fluoranthene	0.039		1.1	mg/kg	SB01-002	6 / 21	0.028 - 0.034						YES	FD
86-73-7	Fluorene	0.03		0.31	mg/kg	SP34-002	4 / 21	0.028 - 0.034						YES	FD
193-39-5	Indeno(1,2,3-cd)pyrene	0.036		0.35	mg/kg	SP02-002	4 / 21	0.028 - 0.034						YES	FD
91-20-3	Naphthalene	0.042		i,1	mg/kg	SP13-003	7 / 21	0.028 - 0.034						YES	FD
85-01-8	Phenanthrene	0.063		i	mg/kg	SP02-002	7 / 21	0.028 - 0.034						YES	FD
129-00-0	Pyrene	0.033		1.2	mg/kg	SB01-002	7 / 21	0.028 - 0.034		<u> </u>				YES	FD

NOTES:

(1) * For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

(2) Minimum/maximum detected concentration.

Former Willow Street Station - RA

(3) Rationale Codes Selection Reason:

election Reason: Frequent Detection (FD)

Deletion Reason: Non Detect Data (ND)

4 of 5 November 2005

COPC = Chemical of Potential Concern

Definitions:

ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

Occurrence, Distribution and Selection of Chemicals of Potential Concern Post-Remediation Resident 2 and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium:

Soil

Exposure Medium: Exposure Point:

Surface/Subsurface soil* Surface/Subsurface soil*

CAS Number	Chemical	Minimum (2) Concentration	Minimum Qualifier	Maximum (2) Concentration	ł I	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits	Concentration Used for Screening	Back- Ground Value (3)	Screening Toxicity Value	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag	Rationale for (4) Contaminant Deletion or Selection
12674-11-2	Arocior 1016					mg/kg		0 / 21	0.09 - 0.1						NO	ND
11104-28-2	Arocior 1221					mg/kg		0 / 21	0.09 - 0.1						NO	ND
11141-16-5	Arocior 1232					mg/kg		0 / 21	0.09 - 0.1						NO	ND
53469-21-9	Aroclor 1242					mg/kg		0 / 21	0.09 - 0.1						NO	ND
12672-29-6	Arocior 1248					mg/kg		0 / 21	0.09 - 0.1						NO	ND
11097-69-1	Arocior 1254					mg/kg		0 / 21	0.18 - 0.21						NO	ND
11096-82-5	Arocior 1260					mg/kg		0 / 21	0.18 - 0.21						NO	ND
7440-36-0	Antimony					mg/kg		0 / 21	0.97 - 1.2		4				NO	ND
7440-38-2	Arsenic	2.5		17	1	mg/kg	SB33-003	21 / 21	0.49 - 0.6		13				YES	ASL/FD
7440-39-3	Barium	19		100	J	mg/kg	SP34-002	21 / 21	0.97 - 1.2		110				NO	BSL
7440-41-7	Beryllium	0.63		1.3		mg/kg	SP03-002; SP34-002	21 / 21	0.52 - 1.3		0.59				YES	ASL/FD
7440-43-9	Cadmium	0.53		0.66		mg/kg	SP13-003	4 / 21	0.5 - 0.6		0.6				YES	ASL/FD
7440-47-3	Chromium	6.9		21	J	mg/kg	SP07-003	21 / 21	0.97 - 1.2		16.2	·			YES	ASL/FD
7440-50-8	Copper	8.9		55	J	mg/kg	SB33-003	21 / 21	0.97 - 1.2		19.6				YES	ASL/FD
7439-92-1	Lead	16		41		mg/kg	SB32-002	21 / 21	0.49 - 1.2		36				YES	ASL/FD
7439-97-6	Mercury	0.033		0.28		mg/kg	SB01-002	7 / 21	0.023 - 0.032		0.06				YES	ASL/FD
7440-02-0	Nickel	5.5		39	J	mg/kg	SP10-003; SP44-002	21 / 21	0.97 - 1.2		18				YES	ASL/FD
7782-49-2	Selenium					mg/kg		0 / 21	0.97 - 1.2		0.48				NO	ND
7440-22-4	Silver					mg/kg		0 / 21	0.97 - 1.2		0.55				NO	ND
7440-28-0	Thallium	1.2		4.2		mg/kg	SB01-002	20 / 21	i - 1		0.32				YES	ASL/FD
7440-66-6	Zinc	23		70	J	mg/kg	SB01-002	21 / 21	4.9 - 6		95				NO	BSL
57-12-5	Total Cyanide					mg/kg		0 / 21	0.24 - 0.34		0.51				NO	ND

(1) * For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

(2) Minimum/maximum detected concentration.

(3) Metropolitan Stastical Areas (MSA) background values for metals were obtained from Illinois Tiered Approach to Corrective Action Objectives (TACO) (IAC 2002).

(4) Rationale Codes

Selection Reason:

Frequent Detection (FD)

Deletion Reason:

Above Screening Level (ASL) Below Screening Level (BSL)

Non Detect Data (ND)

Definitions:

ARAR/TBC = Applicable or Relevant and Appropriate Requirement/To Be Considered

COPC = Chemical of Potential Concern

J = Estimated Value

Table 5 Risk Assessment Data Set Post-Remediation Resident 1 The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Sample Location a	nd Depth (feet below	ground surface)/Con		
Chemical of Potential Concern	SB01-002	SP02-002	SP03-002	SP16-002	SB31-002	SB33-002
(COPC)	8-10	3-4	4-5	9-10	6-8	5-7
Acetone	0.0205	0.091	0.32	0.1	0.032	0.12
Benzene	0.0041	0.015	0.0085	0.0049	0.0065	0.006
2-Butanone	0.008	0.02	0.072	0.01	0.013	0.027
Ethylbenzene	0.0041	0.049	0.0085	0.0049	0.0065	0.006
o-Xylene	0.0041	0.012	0.0085	0.0049	0.0065	0.025
Bis(2-ethylhexyl)phthalate	0.45	0.19	0.22	0.195	0.185	0.2
Carbazole	0.19	0.47	0.22	0.195	0.185	0.2
Acenaphthene	0.0145	0.19	0.017	0.0145	0.014	0.0155
Acenaphthylene	0.0145	0.13	0.017	0.0145	0.029	0.0155
Anthracene	0.16	0.3	0.017	0.0145	0.047	0.0155
Benzo(a)anthracene	0.34	0.43	0.017	0.0145	0.014	0.0155
Benzo(b)fluoranthene	0.32	0.36	0.017	0.0145	0.014	0.0155
Benzo(k)fluoranthene	0.26	0.39	0.017	0.0145	0.014	0.0155
Benzo(g,h,i)perylene	0.23	0.48	0.017	0.0145	0.014	0.0155
Benzo(a)pyrene	0.21	0.52	0.017	0.0145	0.014	0.0155
Chrysene	0.67	0.62	0.017	0.0145	0.075	0.0155
Dibenzo(a,h)anthracene	0.099	0.13	0.017	0.0145	0.014	0.0155
Fluoranthene	1.1	0.85	0.017	0.0145	0.075	0.0155
Fluorene	0.0145	0.21	0.017	0.0145	0.03	0.0155
ndeno(1,2,3-cd)pyrene	0.2	0.35	0.017	0.0145	0.014	0.0155
Naphthalene	0.044	0.28	0.017	0.0145	0.11	0.14
Phenanthrene	0.35	1	0.017	0.0145	0.17	0.076
Pyrene	1.2	1.1	0.017	0.0145	0.13	0.047
Arsenic	9.2	2.5	3.6	12	12	5.1
Beryllium	0.87	0.63	1.3	1.1	0.93	1.2
Chromium	20	6.9	20	17	19	17
Copper	32	8.9	18	39	29	31
ead	41	31	17	21	18	17
Mercury	0.28	0.035	0.0155	0.0135	0.037	0.046
Nickel	33	5.5	24	37	31	26
Thallium	4.2	0.5	1.2	1.8	1.2	1.9

NOTES:

(1) mg/kg - Milligrams per kilogram
(2) Non-detect values are entered as 1/2 the reporting limit

Table 5 (Continued) Risk Assessment Data Set Post-Remediation Resident 1 The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	Sample	Location and Depth ((mg/kg)
Chemical of Potential Concern	SP34-002	SP35-002	SP37-002	SP40-002	SP44-002
(COPC)	5-7	6-7	8-9	7-8	6-7
Acetone	0.14	0.13	0.082	0.071	0.082
Benzene	0.006	0.006	0.00495	0.005	0.00445
2-Butanone	0.012	0.027	0.01	0.01	0.009
Ethylbenzene	0.006	0.006	0.005	0.005	0.00445
o-Xylene	0.006	0.006	0.00495	0.005	0.00445
Bis(2-ethylhexyl)phthalate	0.2	0.195	0.195	0.195	0.2
Carbazole	0.2	0.195	0.195	0.195	0.2
Acenaphthene	0.12	0.015	0.0145	0.0145	0.015
Acenaphthylene	0.086	0.015	0.0145	0.0145	0.015
Anthracene	0.17	0.015	0.0145	0.0145	0.015
Benzo(a)anthracene	0.094	0.064	0.0145	0.0145	0.015
Benzo(b)fluoranthene	0.13	0.041	0.0145	0.0145	0.015
Benzo(k)fluoranthene	0.14	0.056	0.0145	0.0145	0.015
Benzo(g,h,i)perylene	0.36	0.037	0.0145	0.0145	0.015
Benzo(a)pyrene	0.14	0.072	0.0145	0.0145	0.015
Chrysene	0.39	0.066	0.0145	0.0145	0.015
Dibenzo(a,h)anthracene	0.11	0.015	0.0145	0.0145	0.015
Fluoranthene	0.33	0.074	0.0145	0.0145	0.015
Fluorene	0.31	0.015	0.0145	0.0145	0.015
Indeno(1,2,3-cd)pyrene	0.24	0.036	0.0145	0.0145	0.015
Naphthalene	0.015	0.015	0.056	0.0145	0.015
Phenanthrene	0.13	0.015	0.0145	0.0145	0.015
Pyrene	1.2	0.074	0.0145	0.0145	0.015
Arsenic	7.5	5.8	15	10	13
Beryllium	1.3	0.83	1.2	1.1	1.2
Chromium	21	11	20	16	20
Copper	28	11	38	33	31
Lead	19	36	22	19	19
Mercury	0.0155	0.14	0.013	0.0145	0.015
Nickel	33	12	38	36	39
Thallium	2.1	2	2	2.2	1.8

NOTES:

(1) mg/kg - Milligrams per kilogram
(2) Non-detect values are entered as 1/2 the reporting limit.

Table 6 Risk Assessment Data Set Post-Remediation Resident 2 The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Sample Location and Depth (feet below ground surface)/Concentration (mg/kg) Chemical of Potential Concern SB01-002 SP02-002 SP03-002 SP07-003 SP13-003 SB15-003												
Chemical of Potential Concern	SB01-002					SB15-003						
(COPC)	8-10	3-4	4-5	16-17	15-16	10-12						
Acetone	0.0205	0.091	0.32	0.023	0.0275	0.1						
Benzene	0.0041	0.012	0.0085	0.00465	0.0055	0.0055						
2-Butanone	0.008	0.02	0.072	0.0095	0.011	0.011						
o-Xylene	0.0041	0.012	0.0085	0.00465	0.0055	0.0055						
Acenaphthene	0.0145	0.19	0.017	0.015	0.077	0.016						
Acenaphthylene	0.0145	0.13	0.017	0.015	0.015	0.016						
Anthracene	0.16	0.3	0.017	0.015	0.015	0.016						
Benzo(a)anthracene	0.34	0.43	0.017	0.015	0.015	0.016						
Benzo(b)fluoranthene	0.32	0.36	0.017	0.015	0.015	0.016						
Benzo(k)fluoranthene	0.26	0.39	0.017	0.015	0.015	0.016						
Benzo(g,h,i)perylene	0.23	0.48	0.017	0.015	0.015	0.016						
Benzo(a)pyrene	0.21	0.52	0.017	0.015	0.015	0.016						
Chrysene	0.67	0.62	0.017	0.015	0.015	0.016						
Dibenzo(a,h)anthracene	0.099	0.13	0.017	0.015	0.015	0.016						
Fluoranthene	1.1	0.85	0.017	0.015	0.015	0.016						
Fluorene	0.0145	0.21	0.017	0.015	0.036	0.016						
Indeno(1,2,3-cd)pyrene	0.2	0.35	0.017	0.015	0.015	0.016						
Naphthalene	0.044	0.28	0.017	0.015	1.1	0.016						
Phenanthrene	0.35	1	0.017	0.015	0.063	0.016						
Pyrene	1.2	1.1	0.017	0.015	0.015	0.016						
Arsenic	9.2	2.5	3.6	8.1	9.6	5						
Beryllium	0.87	0.63	1.3	1.2	1	1.2						
Cadmium	0.54	0.26	0.3	0.285	0.66	0.285						
Chromium	20	6.9	20	21	17	19						
Соррег	32	8.9	18	24	34	31						
Lead	41	31	17	16	19	16						
Mercury	0.28	0.035	0.0155	0.016	0.061	0.016						
Nickel	33	5.5	24	31	30	30						
Thallium	4.2	0.5	1.2	2.1	1.9	2.5						

NOTES:

(1) mg/kg - Milligrams per kilogram
(2) Non-detect values are entered as 1/2 the reporting limit

Table 6 (Continued) Risk Assessment Data Set Post-Remediation Resident 2

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Sample Location and Depth (feet below ground surface)/Concentration (mg/kg) otential Concern SP16-002 SP16-003 SB31-002 SB33-002 SB33-003 SP34-002												
Chemical of Potential Concern	SP16-002					SP34-002							
(COPC)	9-10	15-16	6-8	5-7	10-12	5-7							
Acetone	0.1	0.031	0.032	0.12	0.032	0.14							
Benzene	0.0049	0.006	0.0065	0.025	0.0065	0.006							
2-Butanone	0.01	0.0125	0.013	0.027	0.013	0.012							
o-Xylene	0.0049	0.006	0.0065	0.025	0.0065	0.006							
Acenaphthene	0.0145	0.0145	0.014	0.0155	0.015	0.12							
Acenaphthylene	0.0145	0.0145	0.029	0.0155	0.015	0.086							
Anthracene	0.0145	0.0145	0.047	0.0155	0.015	0.17							
Benzo(a)anthracene	0.0145	0.0145	0.014	0.0155	0.015	0.094							
Benzo(b)fluoranthene	0.0145	0.0145	0.014	0.0155	0.015	0.13							
Benzo(k)fluoranthene	0.0145	0.0145	0.014	0.0155	0.015	0.14							
Benzo(g,h,i)perylene	0.0145	0.0145	0.014	0.0155	0.015	0.36							
Benzo(a)pyrene	0.0145	0.0145	0.014	0.0155	0.015	0.14							
Chrysene	0.0145	0.0145	0.075	0.0155	0.041	0.39							
Dibenzo(a,h)anthracene	0.0145	0.0145	0.014	0.0155	0.015	0.11							
Fluoranthene	0.0145	0.0145	0.075	0.0155	0.039	0.33							
Fluorene	0.0145	0.0145	0.03	0.0155	0.015	0.31							
Indeno(1,2,3-cd)pyrene	0.0145	0.0145	0.014	0.0155	0.015	0.24							
Naphthalene	0.0145	0.0145	0.11	0.14	0.042	0.015							
Phenanthrene	0.0145	0.0145	0.17	0.076	0.083	0.13							
Pyrene	0.0145	0.0145	0.13	0.047	0.033	1.2							
Arsenic	12	9.6	12	5.1	17	7.5							
Beryllium	1.1	1.1	0.93	1.2	1	1.3							
Cadmium	0.26	0.28	0.275	0.59	0.27	0.295							
Chromium	17	17	19	17	16	21							
Copper	39	28	29	31	55	28							
Lead	21	17	18	17	30	19							
Mercury	0.0135	0.033	0.037	0.046	0.0115	0.0155							
Nickel	37	24	31	26	30	33							
Thallium	1.8	1.7	1.2	1.9	2	2.1							

NOTES:

⁽¹⁾ mg/kg - Milligrams per kilogram
(2) Non-detect values are entered as 1/2 the reporting limit

Table 6 (Continued) Risk Assessment Data Set Post-Remediation Resident 2

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Sample	Location and Depth	(feet below ground su	rtace)/Concentration	(mg/kg)
Chemical of Potential Concern	SP35-002	SP35-003	SP37-002	SP37-003	SP40-002
(COPC)	6-7	12-13	8-9	12-13	7-8
Acetone	0.13	0.021	0.082	0.066	0.071
Benzene	0.006	0.0042	0.00495	0.006	0.005
2-Butanone	0.027	0.0085	0.01	0.0115	0.01
-Xylene	0.006	0.0042	0.00495	0.006	0.005
Acenaphthene	0.015	0.0145	0.0145	0.014	0.0145
Acenaphthylene	0.015	0.0145	0.0145	0.014	0.0145
Anthracene	0.015	0.0145	0.0145	0.014	0.0145
Benzo(a)anthracene	0.064	0.0145	0.0145	0.014	0.0145
Benzo(b)fluoranthene	0.041	0.0145	0.0145	0.014	0.0145
Benzo(k)fluoranthene	0.056	0.0145	0.0145	0.014	0.0145
Benzo(g,h,i)perylene	0.037	0.0145	0.0145	0.014	0.0145
Benzo(a)pyrene	0.072	0.0145	0.0145	0.014	0.0145
Chrysene	0.066	0.0145	0.0145	0.014	0.0145
Dibenzo(a,h)anthracene	0.015	0.0145	0.0145	0.014	0.0145
Juoranthene	0.074	0.0145	0.0145	0.014	0.0145
Fluorene	0.015	0.0145	0.0145	0.014	0.0145
Indeno(1,2,3-cd)pyrene	0.036	0.0145	0.0145	0.014	0.0145
Naphthalene	0.015	0.0145	0.056	0.014	0.0145
Phenanthrene	0.015	0.0145	0.0145	0.014	0.0145
Pyrene	0.074	0.0145	0.0145	0.014	0.0145
Arsenic	5.8	12	15	7.7	10
Beryllium	0.83	1.1	1.2	1.1	1.1
Cadmium	0.28	0.28	0.53	0.295	0.28
Chromium	11	20	20	19	16
Copper	11	30	38	25	33
ead	36	25	22	17	19
Mercury	0.14	0.012	0.013	0.0145	0.0145
Nickel	12	35	38	25	36
Thallium	2	2.2	2	1.8	2.2

NOTES:

(1) mg/kg - Milligrams per kilogram (2) Non-detect values are entered as 1/2 the reporting limit

Table 6 (Continued) Risk Assessment Data Set Post-Remediation Resident 2

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

	Sample Le	ocation and Depth (feet below	ground surface)/Concentration	on (mg/kg)
Chemical of Potential Concern	SP40-003	SP43-003	SP44-002	SP44-003
(COPC)	14-15	11-12	6-7	12-13
Acetone	0.0215	0.0205	0.082	0.0345
Benzene	0.00435	0.00415	0.00445	0.007
2-Butanone	0.0085	0.0085	0.009	0.014
o-Xylene	0.00435	0.00415	0.00445	0.007
Acenaphthene	0.0145	0.0145	0.015	0.0145
Acenaphthylene	0.0145	0.0145	0.015	0.0145
Anthracene	0.0145	0.0145	0.015	0.0145
Benzo(a)anthracene	0.0145	0.0145	0.015	0.0145
Benzo(b)fluoranthene	0.0145	0.0145	0.015	0.0145
Benzo(k)fluoranthene	0.0145	0.0145	0.015	0.0145
Benzo(g,h,i)perylene	0.0145	0.0145	0.015	0.0145
Benzo(a)pyrene	0.0145	0.0145	0.015	0.0145
Chrysene	0.0145	0.0145	0.015	0.0145
Dibenzo(a,h)anthracene	0.0145	0.0145	0.015	0.0145
Fluoranthene	0.0145	0.0145	0.015	0.0145
Fluorene	0.0145	0.0145	0.015	0.0145
Indeno(1,2,3-cd)pyrene	0.0145	0.0145	0.015	0.0145
Naphthalene	0.0145	0.0145	0.015	0.0145
Phenanthrene	0.0145	0.0145	0.015	0.0145
Pyrene	0.0145	0.0145	0.015	0.0145
Arsenic	8.3	9	13	9.3
Beryllium	1.1	1.1	1.2	1.2
Cadmium	0.26	0.25	0.285	0.29
Chromium	19	21	20	20
Copper	28	30	31	33
Lead	17	19	19	20
Mercury	0.014	0.015	0.015	0.013
Nickel	28	33	39	35
Thallium	1.9	1.9	1.8	2.3

NOTES:

(1) mg/kg - Milligrams per kilogram
(2) Non-detect values are entered as 1/2 the reporting limit

Table 7 Statistical Analysis Results Post-Remediation Resident 1 The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Distri	oution					Basic S	statistical An	alysis Results		
a i an i i a	Size of				Non-				Lognormal		Standard		
Chemical of Potential Concern	Sample	Normal	Lognormal	Gamma	parametric	Minimum	Maximum	Mean	Mean	Median	Deviation	95% UCL	95% UCL Calculation
	•					(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Method
Acetone	11			X		0.021	0.32	0.108	0.086	0.091	0.079	0.164	Approximate Gamma
Benzene	11				X	0.004	0.015	0.006	0.006	0.006	0.003	0.008	Mod-t
2-Butanone	11				X	0.008	0.072	0.020	0.015	0.012	0.019	0.044	95% Chebyshev
Ethylbenzene	11				X	0.004	0.049	0.010	0.007	0.006	0.013	0.027	95% Chebyshev
o-Xylene	11		" '		X	0.004	0.025	0.008	0.007	0.006	0.006	0.016	95% Chebyshev
Bis(2-ethylhexyl)phthalate	11				X	0.185	0.45	0.220	0.213	0.195	0.077	0.266	Mod-t
Carbazole	11				X	0.185	0.47	0.222	0.214	0.195	0.083	0.271	Mod-t
Acenaphthene	11				X	0.014	0.19	0.040	0.023	0.015	0.059	0.118	95% Chebyshev
Acenaphthylene	11				X	0.015	0.13	0.033	0.023	0.015	0.038	0.084	95% Chebyshev
Anthracene	11				X	0.015	0.3	0.071	0.034	0.016	0.096	0.198	95% Chebyshev
Benzo(a)anthracene	11				X	0.014	0.43	0.094	0.036	0.016	0.148	0.288	95% Chebyshev
Benzo(b)fluoranthene	11				X	0.014	0.36	0.087	0.035	0.016	0.13	0.258	95% Chebyshev
Benzo(k)fluoranthene	11				X	0.014	0.39	0.086	0.036	0.016	0.127	0.254	95% Chebyshev
Benzo(g,h,i)perylene	11				X	0.014	0.48	0.110	0.038	0.016	0.168	0.331	95% Chebyshev
Benzo(a)pyrene	11				X	0.014	0.52	0.095	0.037	0.016	0.155	0.299	95% Chebyshev
Chrysene	11				X	0.015	0.67	0.174	0.053	0.017	0.258	0.513	95% Chebyshev
Dibenzo(a,h)anthracene	11				X	0.014	0.13	0.042	0.026	0.015	0.046	0.103	95% Chebyshev
Fluoranthene	11				X	0.015	1.1	0.229	0.057	0.017	0.384	0.734	95% Chebyshev
Fluorene	11				X	0.015	0.31	0.061	0.027	0.015	0.101	0.194	95% Chebyshev
Indeno(1,2,3-cd)pyrene	11				X	0.014	0.35	0.085	0.035	0.016	0.12	0.242	95% Chebyshev
Naphthalene	11				X	0.015	0.28	0.066	0.036	0.017	0.083	0.175	95% Chebyshev
Phenanthrene	11				X	0.015	1	0.165	0.052	0.017	0.296	0.554	95% Chebyshev
Pyrene	11			X		0.015	1.2	0.348	0.077	0.047	0.528	0.998	Approximate Gamma
Arsenic	11	X				2.5	15	8.700	7.638	9.2	4.113	10.948	Student's-t
Beryllium	11	X				0.63	1.3	1.060	1.037	1.1	0.216	1.178	Student's-t
Chromium	11				X	6.9	21	17.082	16.356	19	4.415	19.389	Mod-t
Copper	11	X				8.9	39	27.173	24.768	31	10.135	32.712	Student's-t
Lead	11				X	17	41	23.636	22.517	19	8.382	28.387	Mod-t
Mercury	11				X	0.013	0.28	0.057	0.031	0.016	0.083	0.166	95% Chebyshev
Nickel	11				X	5.5	39	28.591	25.322	33	10.97	34.373	Mod-t
Thallium	11			X		0.5	4.2	1.900	1.701	1.9	0.917	2.537	Approximate Gamma

Notes:

References:

USEPA 2004a: ProUCL Version 3.0 User's Guide, April.

Singh, Singh, Iaci 2002: Estimation of the Exposure Point Concentration Term Using a Gamma Distribution. EPA/600/R-02/084.

¹⁾ Distribution types determined using Shapiro-Wilk test.

²⁾ ProUCL Software recommends an appropriate method for calculating 95UCL for each COPC.

Table 8 Statistical Analysis Results Post-Remediation Resident 2 The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Distril	oution					Basic St	atistical Anal	lysis Result		
CI I CD I CLC	Size of				Non-				Lognormal		Standard		
Chemical of Potential Concern	Sample	Normai	Lognormai	Gamma	parametric	Minimum	Maximum	Mean	Mean	Median	Deviation	95% UCL	95% UCL Calculation
						(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Method
Acetone	21		X			0.021	0.32	0.075	0.054	0.066	0.069	0.113	H
Benzene	21				X	0.004	0.025	0.007	0.006	0.006	0.005	0.009	Mod-t
2-Butanone	21				X	0.008	0.072	0.016	0.013	0.011	0.014	0.029	95% Chebyshev
o-Xylene	21				X	0.004	0.025	0.007	0.006	0.006	0.005	0.009	Mod-t
Acenaphthene	21				X	0.014	0.19	0.031	0.02	0.015	0.045	0.074	95% Chebyshev
Acenaphthylene	21				X	0.014	0.13	0.024	0.019	0.015	0.029	0.052	95% Chebyshev
Anthracene	21				X	0.014	0.3	0.044	0.023	0.015	0.074	0.115	99% Chebyshev
Benzo(a)anthracene	21				X	0.014	0.43	0.056	0.024	0.015	0.112	0.299	99% Chebyshev
Benzo(b)fluoranthene	21				X	0.014	0.36	0.053	0.023	0.015	0.099	0.268	99% Chebyshev
Benzo(k)fluoranthene	21				X	0.014	0.39	0.052	0.024	0.015	0.097	0.263	99% Chebyshev
Benzo(g,h,i)perylene	21				X	0.014	0.48	0.065	0.024	0.015	0.128	0.344	99% Chebyshev
Benzo(a)pyrene	21				X	0.014	0.52	0.057	0.024	0.015	0.117	0.312	99% Chebyshev
Chrysene	21				X	0.014	0.67	0.099	0.03	0.015	0.199	0.532	99% Chebyshev
Dibenzo(a,h)anthracene	21				X	0.014	0.13	0.029	0.02	0.015	0.036	0.063	95% Chebyshev
Fluoranthene	21				X	0.014	1.1	0.128	0.031	0.015	0.293	0.763	99% Chebyshev
Fluorene	21				X	0.014	0.31	0.04	0.021	0.015	0.075	0.111	99% Chebyshev
Indeno(1,2,3-cd)pyrene	21				X	0.014	0.35	0.051	0.023	0.015	0.092	0.251	99% Chebyshev
Naphthalene	21				X	0.014	1.1	0.094	0.03	0.015	0.239	0.613	99% Chebyshev
Phenanthrene	21				X	0.014	1	0.099	0.033	0.015	0.222	0.58	99% Chebyshev
Pyrene	21				X	0.014	1.2	0.19	0.036	0.015	0.41	1.08	99% Chebyshev
Arsenic	21	X				2.5	17	9.11	8.32	9.2	3.624	10.474	Student's-t
Beryllium	21				X	0.63	1.3	1.084	1.07	1.1	0.163	1.144	Mod-t
Cadmium	21				X	0.25	0.66	0.336	0.319	0.285	0.124	0.384	Mod-t
Chromium	21				X	6.9	21	17.948	17.489	19	3.458	19.192	Mod-t
Copper	21				X	8.9	55	29.376	27.546	30	9.558	32.983	Mod-t
Lead	21				X	16	41	21.714	20.872	19	6.972	24.433	Mod-t
Mercury	21				X	0.012	0.28	0.04	0.023	0.016	0.062	0.099	95% Chebyshev
Nickel	21				X	5.5	39	29.31	27.401	31	8.186	32.284	Mod-t
Thallium	21				X	0.5	4.2	1.962	1.845	1.9	0.672	2.222	Mod-t

Notes:

1) Distribution types determined using Shapiro-Wilk test.

2) ProUCL Software recommends an appropriate method for calculating 95UCL for each COPC.

References:

USEPA 2004a: ProUCL Version 3.0 User's Guide, April.

Singh, Singh, Iaci 2002: Estimation of the Exposure Point Concentration Term Using a Gamma Distribution. EPA/600/R-02/084.

Medium-Specific Exposure Point Concentration Summary Post-Remediation Resident 1 The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium:

Surface/Subsurface soil* Exposure Medium: Surface/Subsurface soil*

Exposure Point:

Chemical of	Units	Arithmetic Mean	95% UCL	Maximum Detected	Maximum Qualifier	EPC Units	Reasonal	ble Maximum	Exposure	Се	ntral Tender	ncy
Potential	İ	Wican	Data	Concentration			Medium	Medium	Medium	Medium	Medium	Medium
Concern			J				EPC	EPC	EPC	EPC	EPC	EPC
Concern							Value	Statistic	Rationale	Value	Statistic	Rationale
Acetone	mg/kg	0.108	0.164	0.32		mg/kg	0.164	95 UCL	W-Test	0.164	95 UCL	W-Test
Benzene	mg/kg	0.006	0.008	0.015		mg/kg	0.008	95 UCL	W-Test	0.008	95 UCL	W-Test
2-Butanone	mg/kg	0.02	0.044	0.072		mg/kg	0.044	95 UCL	W-Test	0.044	95 UCL	W-Test
Ethylbenzene	mg/kg	0.01	0.027	0.049		mg/kg	0.027	95 UCL	W-Test	0.027	95 UCL	W-Test
o-Xylene	mg/kg	0.008	0.016	0.025		mg/kg	0.016	95 UCL	W-Test	0.016	95 UCL	W-Test
Bis(2-ethylhexyl)phthalate	mg/kg	0.22	0.266	0.45		mg/kg	0.266	95 UCL	W-Test	0.266	95 UCL	W-Test
Carbazole	mg/kg	0.222	0.271	0 47		mg/kg	0.271	95 UCL	W-Test	0 271	95 UCL	W-Test
Acenaphthene	mg/kg	0.04	0.118	0.19	Ì	mg/kg	0.118	95 UCL	W-Test	0.118	95 UCL	W-Test
Acenaphthylene	mg/kg	0.033	0.084	0.13	1	mg/kg	0.084	95 UCL	W-Test	0.084	95 UCL	W-Test
Anthracene	mg/kg	0.071	0.198	0.3		mg/kg	0.198	95 UCL	W-Test	0.198	95 UCL	W-Test
Benzo(a)anthracene	mg/kg	0.094	0.288	0.43		mg/kg	0.288	95 UCL	W-Test	0.288	95 UCL	W-Test
Benzo(b)fluoranthene	mg/kg	0087	0 258	0.36		mg/kg	0 258	95 UCL	W-Test	0.258	95 UCL	W-Test
Benzo(k)fluoranthene	mg/kg	0.086	0.254	0.39		mg/kg	0.254	95 UCL	W-Test	0.254	95 UCL	W-Test
Benzo(g,h,i)perylene	mg/kg	0.11	0.331	0.48		mg/kg	0 331	95 UCL	W-Test	0.331	95 UCL	W-Test
Benzo(a)pyrene	mg/kg	0.095	0.299	0 52		mg/kg	0.299	95 UCL	W-Test	0.299	95 UCL	W-Test
Chrysene	mg/kg	0.174	0.513	0.67		mg/kg	0.513	95 UCL	W-Test	0.513	95 UCL	W-Test
Dibenzo(a,h)anthracene	mg/kg	0.042	0.103	0.13		mg/kg	0.103	95 UCL	W-Test	0.103	95 UCL	W-Test
Fluoranthene	mg/kg	0.229	0734	1.1		mg/kg	0.734	95 UCL	W-Test	0.734	95 UCL	W-Test
Fluorene	mg/kg	0.061	0.194	0.31		mg/kg	0.194	95 UCL	W-Test	0.194	95 UCL	W-Test
Indeno(1,2,3-cd)pyrene	mg/kg	0.085	0 242	0.35		mg/kg	0.242	95 UCL	W-Test	0 242	95 UCL	W-Test
Naphthalene	mg/kg	0.066	0.175	0 28		mg/kg	0.175	95 UCL	W-Test	0.175	95 UCL	W-Test
Phenanthrene	mg/kg	0.165	0.554	1		mg/kg	0.554	95 UCL	W-Test	0.554	95 UCL	W-Test
Pyrene	mg/kg	0.348	0.998	12		mg/kg	0.998	95 UCL	W-Test	0.998	95 UCL	W-Test
Arsenic**	mg/kg	8.7	10.948	15	J							, , , ,
Beryllium	mg/kg	1.06	1.178	1.3		mg/kg	1.178	95 UCL	W-Test	1.178	95 UCL	W-Test W-Test
Chromium	mg/kg	17.082	19.389	21	J	mg/kg	19.389	95 UCL	W-Test	19.389	95 UCL	1
Copper	mg/kg	27.173	32.712	39	J	mg/kg	32.712	95 UCL	W-Test	32.712	95 UCL	W-Test
Lead**	mg/kg	23.636	28.387	41							OC LIGI	W T4
d.	B	l	0.166	1 000	1	ma/lra	1 0.166	05 LICI	W-Test	0.166	95 UCL	W-Test

W-Test

W-Test

W-Test

95 UCL

95 UCL

95 UCL

0.166

34.373

2,537

95 UCL

95 UCL

95 UCL

0.166

34.373

2.537

mg/kg

mg/kg

mg/kg

J

W-Test

W-Test

W-Test

Thallium

Mercury

Nickel

mg/kg

mg/kg

mg/kg

0.057

28.591

1.9

0.166

34.373

2.537

0.28

39

4.2

^{(1) *} For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface

⁽²⁾ UCL - Upper Confidence Limit.

⁽³⁾ EPC - Exposure Point Concentration.

^{(4) **} Arsenic and lead are eliminated because the 95% UCL value is less than the MSA inorganic background level

⁽⁵⁾ J - Estimated value.

Medium-Specific Exposure Point Concentration Summary Post-Remediation Resident 2 The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

Scenario Timeframe: Future Medium:

Exposure Medium:

Surface/Subsurface soil*

	Exposure I		Surface/Sub	surface soil*								
									1			
Chemical of	Units	Arithmetic Mean	95% UCL of the	Maximum Detected	Maximum Qualifier	EPC Units	Reasonal	ble Maximum	Exposure	Ce	ntral Tender	ncy
Potential		1110011	Data	Concentration			Medium	Medium	Medium	Medium	Medium	Medium
Concern							EPC	EPC	EPC	EPC	EPC	EPC
Concern							Value	Statistic	Rationale	Value	Statistic	Rationale
Acetone	mg/kg	0.075	0.113	0.32		mg/kg	0.113	95 UCL	W-Test	0.113	95 UCL	W-Test
Benzene	mg/kg	0.007	0.009	0.015		mg/kg	0.009	95 UCL	W-Test	0.009	95 UCL	W-Test
2-Butanone	mg/kg	0.016	0.029	0.072		mg/kg	0.029	95 UCL	W-Test	0.029	95 UCL	W-Test
o-Xylene	mg/kg	0.007	0.009	0.025		mg/kg	0.009	95 UCL	W-Test	0.009	95 UCL	W-Test
Acenaphthene	mg/kg	0.031	0.074	0.19		mg/kg	0.074	95 UCL	W-Test	0.074	95 UCL	W-Test
Acenaphthylene	mg/kg	0.024	0.052	0.13		mg/kg	0.052	95 UCL	W-Test	0.052	95 UCL	W-Test
Anthracene	mg/kg	0.044	0.115	0.3		mg/kg	0.115	95 UCL	W-Test	0.115	95 UCL	W-Test
Benzo(a)anthracene	mg/kg	0.056	0.299	0.43		mg/kg	0.299	95 UCL	W-Test	0 299	95 UCL	W-Test
Benzo(b)fluoranthene	mg/kg	0.053	0.268	0.36		mg/kg	0.268	95 UCL	W-Test	0.268	95 UCL	W-Test
Benzo(k)fluoranthene	mg/kg	0.052	0.263	0.39		mg/kg	0.263	95 UCL	W-Test	0.263	95 UCL	W-Test
Benzo(g,h,i)perylene	mg/kg	0.065	0.344	0.48		mg/kg	0.344	95 UCL	W-Test	0.344	95 UCL	W-Test
Benzo(a)pyrene	mg/kg	0.057	0.312	0.52		mg/kg	0.312	95 UCL	W-Test	0 312	95 UCL	W-Test
Chrysene	mg/kg	0.099	0.532	067		mg/kg	0.532	95 UCL	W-Test	0.532	95 UCL	W-Test
Dibenzo(a,h)anthracene	mg/kg	0.029	0.063	0.13		mg/kg	0.063	95 UCL	W-Test	0.063	95 UCL	W-Test
Fluoranthene	mg/kg	0.128	0 763	1.1		mg/kg	0.763	95 UCL	W-Test	0.763	95 UCL	W-Test
Fluorene	mg/kg	0.040	0.111	0.31		mg/kg	0.111	95 UCL	W-Test	0.111	95 UCL	W-Test
Indeno(1,2,3-cd)pyrene	mg/kg	0.051	0.251	0.35		mg/kg	0.251	95 UCL	W-Test	0 251	95 UCL	W-Test
Naphthalene	mg/kg	0.094	0.613	1.1		mg/kg	0.613	95 UCL	W-Test	0.613	95 UCL	W-Test
Phenanthrene	mg/kg	0.099	0.58	1		mg/kg	0.58	95 UCL	W-Test	0.58	95 UCL	W-Test
Pyrene	mg/kg	0.190	108	1.2		mg/kg	1.08	95 UCL	W-Test	1.08	95 UCL	W-Test
Arsenic**	mg/kg	9.110	10.474	17	J							
Beryllium	mg/kg	1.084	1.144	1.3		mg/kg	1.144	95 UCL	W-Test	1.144	95 UCL	W-Test
Cadmium**	mg/kg	0.336	0.384	0 66							l	
Chromium	mg/kg	17.948	19.192	21	J	mg/kg	19.192	95 UCL	W-Test	19.192	95 UCL	W-Test
Copper	mg/kg	29.376	32.983	55	J	mg/kg	32.983	95 UCL	W-Test	32.983	95 UCL	W-Test
Lead**	mg/kg	21.714	24.433	41								
Mercury	mg/kg	0.040	0.099	0.28		mg/kg	0.099	95 UCL	W-Test	0.099	95 UCL	W-Test
Nickel	mg/kg	29.310	32.284	39	J	mg/kg	32.284	95 UCL	W-Test	32.284	95 UCL	W-Test
Thallium	mg/kg	1.962	2,222	4.2		mg/kg	2.222	95 UCL	W-Test	2.222	95 UCL	W-Test

Thallium

^{(1) *} For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

⁽²⁾ UCL - Upper Confidence Limit

⁽³⁾ EPC - Exposure Point Concentration

^{(4) **} Arsenic, cadmium and lead are eliminated because the 95% UCI. value is less than the MSA inorganic background level

⁽⁵⁾ J - Estimated value.

Table 11 Medium-Specific Exposure Point Concentration Summary Post-Remediation Utility Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Subsurface Soil
Exposure Point: Subsurface Soil

Chemical of	Units	Arithmetic Mean	95% UCL of the	Maximum Detected	Maximum Oualifier	EPC Units	Reasonal	ble Maximum	Exposure	С	entral Tende	ency
Potential		Ivican	Data	Concentration	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0	Medium	Medium	Medium	Medium	Medium	Medium
Concern			2				EPC	EPC	EPC	EPC	EPC	EPC
Concern							Value	Statistic	Rationale	Value	Statistic	Rationale
Acetone	mg/kg	NA	NA	0.32		mg/kg	0.32	Max	Site-Wide	0 32	Max	Site-Wide
Benzene	mg/kg	NA.	NA	0.015		mg/kg	0.015	Max	Site-Wide	0.015	Max	Site-Wide
2-Butanone	mg/kg	NA	NA	0 072		mg/kg	0.072	Max	Site-Wide	0.072	Max	Site-Wide
Ethylbenzene	mg/kg	NA	ΝA	0.049		mg/kg	0.049	Max	Site-Wide	0.049	Max	Site-Wide
o-Xylene	mg/kg	NA	NA	0.025		mg/kg	0.025	Max	Site-Wide	0.025	Max	Site-Wide
Bis(2-ethylhexyl)phthalate	mg/kg	NA	NA	0.45		mg/kg	0.45	Max	Site-Wide	0.45	Max	Site-Wide
Carbazole	mg/kg	NA	NA	0.47		mg/kg	0.47	Max	Site-Wide	0.47	Max	Site-Wide
Acenaphthene	mg/kg	NA	NA	0.19		mg/kg	0.19	Max	Site-Wide	0.19	Max	Site-Wide
Acenaphthylene	mg/kg	NA	NA	0.13		mg/kg	0.13	Max	Site-Wide	0.13	Max	Site-Wide
Anthracene	mg/kg	NA	NA	0.3		mg/kg	0.3	Max	Site-Wide	0.3	Max	Site-Wide
Benzo(a)anthracene	mg/kg	NA	NA	0.43		mg/kg	0.43	Max	Site-Wide	0.43	Max	Site-Wide
Benzo(b)fluoranthene	mg/kg	NA	NA	0.36		mg/kg	0.36	Max	Site-Wide	0.36	Max	Site-Wide
Benzo(k)fluoranthene	mg/kg	NA	NA	0.39		mg/kg	0.39	Max	Site-Wide	0.39	Max	Site-Wide
Benzo(g,h,i)perylene	mg/kg	NA	NA	0.48		mg/kg	0.48	Max	Site-Wide	0.48	Max	Site-Wide
Benzo(a)pyrene	mg/kg	NA	NA	0.52		mg/kg	0.52	Max	Site-Wide	0.52	Max	Site-Wide
Chrysene	mg/kg	NA	NA	0.67		mg/kg	0.67	Max	Site-Wide	0.67	Max	Site-Wide
Dibenzo(a,h)anthracene	mg/kg	NA	NA	0.13		mg/kg	0.13	Max	Site-Wide	0.13	Max	Site-Wide
Fluoranthene	mg/kg	NA	NA	1.1		mg/kg	1.1	Max	Site-Wide	1.1	Max	Site-Wide
Fluorene	mg/kg	NA	NA	0.31		mg/kg	0.31	Max	Site-Wide	0.31	Max	Site-Wide
Indeno(1,2,3-cd)pyrene	mg/kg	NA	NA	0.35		mg/kg	0.35	Max	Site-Wide	0.35	Max	Site-Wide
Naphthalene	mg/kg	NA	NA	0.28	İ	mg/kg	0 28	Max	Site-Wide	0.28	Max	Site-Wide
Phenanthrene	mg/kg	NA	NA	1		mg/kg	1	Max	Site-Wide	1	Max	Site-Wide
Pyrene	mg/kg	NA	NA	12		mg/kg	1.2	Max	Site-Wide	1.2	Max	Site-Wide
Arsenic	mg/kg	NA	NA	15	J	mg/kg	15	Max	Site-Wide	15	Max	Site-Wide
Beryllium	mg/kg	NA.	NA	1.3		mg/kg	1.3	Max	Site-Wide	1.3	Max	Site-Wide
Chromium	mg/kg	NA NA	NA.	21	J	mg/kg	21	Max	Site-Wide	21	Max	Site-Wide
Copper	mg/kg	NA	NA	39	J	mg/kg	39	Max	Site-Wide	39	Max	Site-Wide
Lead	mg/kg	NA	NA	41		mg/kg	41	Max	Site-Wide	41	Max	Site-Wide
Mercury	mg/kg	NA	NA	0.28		mg/kg	0.28	Max	Site-Wide	0.28	Max	Site-Wide
Nickel	mg/kg	NA	NA	39	J	mg/kg	39	Max	Site-Wide	39	Max	Site-Wide
Thallium	mg/kg	NA	NA	4.2		mg/kg	4.2	Max	Site-Wide	4.2	Max	Site-Wide

Notes:

(1) UCL - Upper Confidence Limit.

(2) EPC - Exposure Point Concentration

(3) NA - Not Applicable

(4) J - Estimated value

Medium-Specific Exposure Point Concentration Summary Post-Remediation Construction Worker The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

Scenario Timeframe: Future Medium: Soil

Exposure Medium: Subsurface Soil Exposure Point: Subsurface Soil

Chemical	Units	Arithmetic	95% UCL	Maximum	Maximum	EPC	Reasona	ble Maximum	Exposure	C	entral Tende	ency
of		Mean	of the	Detected	Qualifier	Units		·····				
Potential			Data	Concentration			Medium	Medium	Medium	Medium	Medium	Medium
Concern							EPC	EPC	EPC	EPC	EPC	EPC
							Value	Statistic	Rationale	Value	Statistic	Rationale
Acetone	mg/kg	NA	NA	0.32		mg/kg	0.32	Max	Site-Wide	0.32	Max	Site-Wide
Benzene	mg/kg	NA	NA	0.015		mg/kg	0.015	Max	Site-Wide	0.015	Max	Site-Wide
2-Butanone	mg/kg	NA	NA	0.072		mg/kg	0.072	Max	Site-Wide	0.072	Max	Site-Wide
o-Xylene	mg/kg	NA	NA	0.025		mg/kg	0.025	Max	Site-Wide	0025	Max	Site-Wide
Acenaphthene	mg/kg	NA	NA	0.19		mg/kg	0.19	Max	Site-Wide	0.19	Max	Site-Wide
Acenaphthylene	mg/kg	NA	NA	0.13		mg/kg	0.13	Max	Site-Wide	0.13	Max	Site-Wide
Anthracene	mg/kg	NA	NA	0.3		mg/kg	0.3	Max	Site-Wide	0.3	Max	Site-Wide
Benzo(a)anthracene	mg/kg	NA	NA	0.43		mg/kg	0.43	Max	Site-Wide	0.43	Max	Site-Wide
Benzo(b)fluoranthene	mg/kg	NA	NA	0.36		mg/kg	0.36	Max	Site-Wide	0.36	Max	Site-Wide
Benzo(k)fluoranthene	mg/kg	NA	NA	0.39		mg/kg	0.39	Max	Site-Wide	0.39	Max	Site-Wide
Benzo(g,h,i)perylene	mg/kg	NA	NA	0.48		mg/kg	0.48	Max	Site-Wide	0.48	Max	Site-Wide
Benzo(a)pyrene	mg/kg	NA	NA	0 52		mg/kg	0.52	Max	Site-Wide	0.52	Max	Site-Wide
Chrysene	mg/kg	NA	NA	0.67		mg/kg	0.67	Max	Site-Wide	0.67	Max	Site-Wide
Dibenzo(a,h)anthracene	mg/kg	NA	NA	0.13		mg/kg	0.13	Max	Site-Wide	0.13	Max	Site-Wide
Fluoranthene	mg/kg	NA	NA	1.1		mg/kg	11	Max	Site-Wide	1.1	Max	Site-Wide
Fluorene	mg/kg	NA	NA	0 31		mg/kg	0.31	Max	Site-Wide	0.31	Max	Site-Wide
Indeno(1,2,3-cd)pyrene	mg/kg	NA	NA	0 35		mg/kg	0.35	Max	Site-Wide	0.35	Max	Site-Wide
Naphthalene	mg/kg	NA	NA	1.1		mg/kg	11	Max	Site-Wide	1.1	Max	Site-Wide
Phenanthrene	mg/kg	NA	NA	1		mg/kg	1	Max	Site-Wide	1	Max	Site-Wide
Pyrene	mg/kg	NA	NA	1.2		mg/kg	12	Max	Site-Wide	1.2	Max	Site-Wide
Arsenic	mg/kg	NA	NA	17	J	mg/kg	17	Max	Site-Wide	17	Max	Site-Wide
Beryllium	mg/kg	NA	NA	13		mg/kg	13	Max	Site-Wide	1.3	Max	Site-Wide
Cadmium	mg/kg	NA	NA	0.66		mg/kg	0.66	Max	Site-Wide	0.66	Max	Site-Wide
Chromium	mg/kg	NA	NA	21	J	mg/kg	21	Max	Site-Wide	21	Max	Site-Wide
Copper	mg/kg	NA	NA	55	J	mg/kg	55	Max	Site-Wide	55	Max	Site-Wide
Lead	mg/kg	NA	NA	41		mg/kg	41	Max	Site-Wide	41	Max	Site-Wide
Mercury	mg/kg	NA	NA	0 28		mg/kg	0.28	Max	Site-Wide	0.28	Max	Site-Wide
Nickel	mg/kg	NA	NA	39	J	mg/kg	39	Max	Site-Wide	39	Max	Site-Wide
Thallium	mg/kg	NA	NA	4.2		mg/kg	4.2	Max	Site-Wide	4.2	Max	Site-Wide

Notes:

(1) UCL - Upper Confidence Limit (2) EPC - Exposure Point Concentration.

(3) NA - Not Applicable. (4) J - Estimated value

Vapor Emission Rate Calculations Post-Remediation Resident 1 and 2 The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Equation:

Da =
$$[[(\theta a^{3})^{33} \times Di \times H') + (\theta w^{3})^{33} \times Dw)] / n^{2}] / [(\rho_{b} \times Kd) + \theta w + (\theta a \times H')]$$

(35 IAC 742, Appendix C, Table A, Equation S10)

Where:

 \overline{Da} = Apparent diffusivity representing emissions (cm²/s)

n = Total soil porosity = 1 - $(\rho b/\rho s)$ (l_{pore}/l_{soil})

 $\rho b = Dry soil bulk density (g/cm³)$

 $\rho s = Soil particle density (g/cm³)$

 $\theta_W = \text{Water filled soil porosity } (l_{water}/l_{soil})$

 $\theta a = Air filled soil porosity = n - \theta w (l_{air}/l_{soil})$

Di = Diffusivity in air (cm²/s), chemical specific

Dw = Diffusivity in water (cm²/s), chemical specific

H' = Henry's Law Constant (dimensionless) at 25 °C, chemical-specific

Kd = Soil -water partition coefficient (cm $^3/g$) = Koc x foc (organics), chemical specific

Koc = Soil organic carbon parition coefficient (cm³/g), chemical specific

foc = Fraction organic carbon in soil (g/g)

Variable Values:

n =	$0.43 l_{pore}/l_{soil}$	Unitless (IAC 2002)
$\rho b =$	1.5 g/cm^3	Default Value (IAC 2002)
ρs =	2.65 g/cm^3	Default Value (IAC 2002)
$\theta w =$	$0.30 l_{\text{water}}/l_{\text{soil}}$	Subsurface Value, (IAC 2002)
$\theta a =$	$0.13 l_{air}/l_{soil}$	Subsurface Value, (IAC 2002)
foc =	0.002 g/g	Subsurface Value, (IAC 2002)

Chemical of Potential Concern	Di (cm²/s)	Dw (cm ² /s)	H' (unitless)	Koc (cm³/g)	Kd (cm ³ /g)	Da (cm ² /s)
Acetone	1.24E-01	1.14E-05	1.59E-03	5.75E-01	1.15E-03	7.48E-06
Benzene	8.80E-02	9.80E-06	2.28E-01	5.89E+01	1.18E-01	2.36E-04
2-Butanone	9.00E-02	9.80E-06	1.10E-03	4.50E+00	9.00E-03	4.86E-06
Ethylbenzene*	7.50E-02	7.86E-06	3.23E-01	3.63E+02	7.26E-01	1.01E-04
o-Xylene	8.70E-02	1.00E-05	2.13E-01	3.63E+02	7.26E-01	7.80E-05
Naphthalene	5.90E-02	7.50E-06	1.98E-02	2.00E+03	4.00E+00	1.21E-06

Notes:

- (1) *COPC for Resident 1 scenario only
- (2) Di, Dw, H' and Koc from 35 IAC 742, Appendix C, Table E

Soil to Air Volatilization Factor Calculations Post-Remediation Resident 1 and 2 Former Willow Street Station Gas Distribution and Storage Facility, 1640 North Kingsbury Street

Equation:

VF =
$$[(Q/C) \times (3.14 \times Da \times T)^{1/2} \times 10^{-4} (m^2/cm^2)] / [2 \times \rho b \times Da]$$

(35 IAC 742, Appendix C, Table A, Equation S8)

Where:

VF = Soil to air volatilization factor (m³/kg)

Q/C = Inverse of the ratio of mean air concentration to emission flux at the center of the source representing the site specific dispersion factor $(g/m^2-s \text{ per kg/m}^2)$

= $A \times \exp(((\ln Asite-B)2)/C)$ (USEPA 2002b)

Where:

A = Constant based on air dispersion modeling for specific climate zones

B = Constant based on air dispersion modeling for specific climate zones

C = Constant based on air dispersion modeling for specific climate zones

Asite = Extent of the site or contamination, can range from 0.5 to 500 acres (acres)

 $Da = Apparent diffusivity representing emissions (cm <math>^2$ /s)

T = Exposure interval (s)

 $\rho b = Dry soil bulk density (g/cm^3)$

Variable Values:

A = 16.8653 (Zone 7 Chicago, IL) (USEPA 2002b)

B = 18.7848 (Zone 7 Chicago, IL) (USEPA 2002b)

C = 215.0624 (Zone 7 Chicago, IL) (USEPA 2002b)

Asite = 3.4 acres (site specific)

T (RME)= 9.5E+08 s (site specific) (30 years, 24 hr/day)

T (CT)= 2.8E+08 s (site specific) (9 years, 24 hr/day)

 $\rho b = 1.5 \text{ g/cm}^3$

Chemical of	Q/C	Da	VF (RME)	VF (CT)
Potential Concern	(g/m ² -s per kg/m ²)	(cm ² /s)	(m ³ /kg)	(m ³ /kg)
Acetone	70.75	7.48E-06	4.71E+04	2.56E+04
Benzene	70.75	2.36E-04	8.38E+03	4.55E+03
2-Butanone	70.75	4.86E-06	5.84E+04	3.17E+04
Ethylbenzene*	70.75	1.01E-04	1.28E+04	6.97E+03
o-Xylene	70.75	7.80E-05	1.46E+04	7.92E+03
Naphthalene	70.75	1.21E-06	1.17E+05	6.36E+04

Notes:

- (1) Da value from Table 13.
- (2) *COPC for Resident 1 scenario only.

Vapor Emission Rate Calculations Post-Remediation Utility Worker and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Equation:

$$Da = [[(\theta a^{3.33} \times Di \times H') + (\theta w^{3.33} \times Dw)] / n^2] / [(\rho_b \times Kd) + \theta w + (\theta a \times H')]$$

Where:

Da = Apparent diffusivity representing emissions (cm²/s)

n = Total soil porosity = 1 - $(\rho b/\rho s)$ (l_{pore}/l_{soil})

 $\rho b = Dry soil bulk density (g/cm³)$

 $\rho s = Soil particle density (g/cm³)$

 θ_{W} = Water filled soil porosity (l_{water}/l_{soil})

 $\theta a = \text{ Air filled soil porosity} = n - \theta w (l_{air}/l_{soil})$

Di = Diffusivity in air (cm²/s), chemical specific

Dw = Diffusivity in water (cm²/s), chemical specific

H' = Henry's Law Constant (dimensionless) at 25 °C, chemical-specific

Kd = Soil -water partition coefficient (cm $^3/g$) = Koc x foc (organics), chemical specific

Koc = Soil organic carbon parition coefficient (cm ³/g), chemical specific

foc = Fraction organic carbon in soil (g/g)

Variable Values:

$\mathbf{n} =$	$0.43 l_{pore}/l_{soil}$	Unitless (IAC 2002)
$\rho b =$	1.5 g/cm^3	Default Value (IAC 2002)
$\rho_{S} =$	2.65 g/cm^3	Default Value (IAC 2002)
$\theta w =$	$0.15 l_{\text{water}}/l_{\text{soil}}$	Surface Value, USEPA model for construction worker assumes all
		contamination is at the surface of the site (IAC 2002, USEPA 2002b).
$\theta a =$	$0.28 l_{air}/l_{soil}$	Surface Value, USEPA model for construction worker assumes all
		contamination is at the surface of the site (IAC 2002, USEPA 2002b).
foc =	0.006 g/g	Surface Value, USEPA model for construction worker assumes all
		contamination is at the surface of the site (IAC 2002, USEPA 2002b).

Chemical of Potential Concern	Di (cm²/s)	Dw (cm ² /s)	H' (unitless)	Koc (cm ³ /g)	Kd (cm³/g)	Da (cm²/s)
Acetone	1.24E-01	1.14E-05	1.59E-03	5.75E-01	3.45E-03	9.73E-05
Benzene	8.80E-02	9.80E-06	2.28E-01	5.89E+01	3.53E-01	2.06E-03
2-Butanone	9.00E-02	9.80E-06	1.10E-03	4.50E+00	2.70E-02	4.01E-05
Ethylbenzene*	7.50E-02	7.86E-06	3.23E-01	3.63E+02	2.18E+00	5.27E-04
o-Xylene	8.70E-02	1.00E-05	2.13E-01	3.63E+02	2.18E+00	4.06E-04
Naphthalene	5.90E-02	7.50E-06	1.98E-02	2.00E+03	1.20E+01	4.91E-06

Note:

(1) *COPC for Utility Worker scenario only

Soil to Air Volatilization Factor Calculations Post-Remediation Utility Worker and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Street

Equation:

VF =
$$[(Q/Csa) \times (3.14 \times Da \times T)^{1/2} \times 10^{-4} (m^2/cm^2) \times 1/F_D] / [2 \times \rho b \times Da]$$

(35 IAC 742, Appendix C, Table A, Equation S8)

Where:

VF = Soil to air volatilization factor (m³/kg)

Q/Csa = Inverse of the ratio of mean air conc. to emission flux at the center of the source representing the site specific dispersion factor $(g/m^2-s per kg/m^2)$

= $A \times \exp(((\ln Ac-B)^2)/C)$ (USEPA 2002b)

Where:

A = Constant based on air dispersion modeling

B = Constant based on air dispersion modeling

C = Constant based on air dispersion modeling

Ac = Constant based on air dispersion modeling

Da = Apparent diffusivity representing emissions (cm²/s)

T = Exposure interval (s)

 $\rho b = \text{Dry soil bulk density } (g/\text{cm}^3)$

0.185 unitless

F_D = Utility/Construction Worker dispersion correction factor

Variable Values:

$\mathbf{A} =$	2.4538	(USEPA 2002b)
B =	17.5660	(USEPA 2002b)
$\mathbf{C} =$	189.0426	(USEPA 2002b)
Asite =	3.4	acres (site specific)
T =	3.2E+07	s (site specific) (365 days, 24 hr/day = Exposure Duration)
ρb =	1.5	g/cm ³

Chemical of	Q/Csa	Da	VF	VF'
Potential Concern	(g/m ² -s per kg/m ²)	(cm^2/s)	(m ³ /kg)	(m ³ /kg)
Acetone	10.08	9.73E-05	1.83E+03	1.83E+02
Benzene	10.08	2.06E-03	3.98E+02	3.98E+01
2-Butanone	10.08	4.01E-05	2.85E+03	2.85E+02
Ethylbenzene*	10.08	5.27E-04	7.87E+02	7.87E+01
o-Xylene	10.08	4.06E-04	8.96E+02	8.96E+01
Naphthalene	10.08	4.91E-06	8.15E+03	8.15E+02

Notes:

- (1) Da value from Table 15
- (2) *COPC for Utility Worker scenario only
- (3) VF = Volatilization Factor adjusted for agitation

Table 17a Non-Cancer Toxicity Data — Oral/Dermal Post-Remediation Resident The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

10-10 Total Anagoni y Critical									
Chemical	Chronic/	Oral RfD	Oral RfD	GI Absorption	Adjusted	Units	Target	Sources of RfD/	Date (2)
of Potential	Subchronic	Value	Units	Efficiency	Dermal		Organ or	Absorption/	(MM/DD/YYYY)
Concern				(%)	RfD (1)		System	Target Organ	02/08/2005
Acetone	Chronic	9.0E-01	mg/kg-day	83	NC	mg/kg-day	increased liver/kidney wt, nephrotoxicity	IRIS/ATSDR 1992/IRIS, TACO	
Benzene	Chronic	4.0E-03	mg/kg-day	90	NC	mg/kg-day	decreased lymphocyte count	IRIS/ATSDR 1995/ IRIS, TACO	02/08/2005
2-Butanone	Chronic	6.0E-01	mg/kg-day	80	NC	mg/kg-day	decreased fetal birth rate	IRIS/ATSDR 1992/IRIS, TACO	02/08/2005
Ethylbenzene	Chronic	1.0E-01	mg/kg-day	97	NC	mg/kg-day	liver, kidney toxicity	IRIS/ATSDR 1997/IRIS, TACO	02/08/2005
o-Xylene	Chronic	2.0E-01	mg/kg-day	92	NC	mg/kg-day	CNS, hyperactivity, decreased body weight, increased mortality	IRIS/ATSDR 1995/IRIS, TACO	02/08/2005
Bis(2-ethylhexyl)phthalate	Chronic	2.0E-02	mg/kg-day	NA	2.0E-02	mg/kg-day	increased liver weight and tumors	IRIS/NA/IRIS, TACO	02/08/2005
Carbazole	NA	NA	mg/kg-day	70	NA	mg/kg-day	NA	IRIS/USEPA 1986/IRIS, TACO	02/08/2005
Acenaphthene	Chronic	6.0E-02	mg/kg-day	NA	6.0E-02	mg/kg-day	liver, hepatotoxicity	IRIS/NA/IRIS, TACO	02/08/2005
Acenaphthylene	NA	NA	mg/kg-day	NA	NA	mg/kg-day	NA	IRIS/NA/IRIS, TACO	02/08/2005
Anthracene	Chronic	3.0E-01	mg/kg-day	71	3.0E-01	mg/kg-day	no observed effects	IRIS/ATSDR 1995/IRIS, TACO	02/08/2005
Benzo(a)anthracene	NA	NA	mg/kg-day	100	NA	mg/kg-day	NA	IRIS/ATSDR 1990/IRIS, TACO	02/08/2005
Benzo(b)fluoranthene	NA	NA	mg/kg-day	NA	NA	mg/kg-day	NA	IRIS/ATSDR 1990/IRIS, TACO	02/08/2005
Benzo(k)fluoranthene	NA	NA	mg/kg-day	NA	NA	mg/kg-day	NA	IRIS/NA/IRIS, TACO	02/08/2005
Benzo(g,h,i)perylene	NA	NA	mg/kg-day	NA	NA	mg/kg-day	NA	IRIS/NA/IRIS, TACO	02/08/2005
Benzo(a)pyrene	NA	NA	mg/kg-day	80	NA	mg/kg-day	NA	IRIS/ATSDR 1995/IRIS, TACO	02/08/2005
Chrysene	NA	NA	mg/kg-day	41	NA ·	mg/kg-day	NA	IRIS/ATSDR 1990/IRIS, TACO	02/08/2005
Dibenzo(a,h)anthracene	NA	NA	mg/kg-day	90	NA	mg/kg-day	NA	IRIS/ATSDR 1990/IRIS, TACO	02/08/2005
Fluoranthene	Chronic	4.0E-02	mg/kg-day	NA	4.0E-02	mg/kg-day	kidney, nephropathy, increased liver wt,	IRIS/NA/IRIS, TACO	02/08/2005
Fluorene	Chronic	4.0E-02	mg/kg-day	NA	4.0E-02	mg/kg-day	circulatory system, decreased RBC, packed cell volume & hemoglobin	IRIS/NA/IRIS, TACO	02/08/2005
Indeno(1,2,3-cd)pyrene	NA	NA	mg/kg-day	NA	NA	mg/kg-day	NA	IRIS/NA/IRIS, TACO	02/08/2005
Naphthalene	Chronic	2.0E-02	mg/kg-day	l _{NA}	2.0E-02	mg/kg-day	decreased mean terminal body wt	IRIS/ATSDR 1995/IRIS, TACO	02/08/2005
Phenanthrene	NA	NA	mg/kg-day	97	NA	mg/kg-day	NA	IRIS/ATSDR 1995/IRIS, TACO	02/08/2005
Pyrene	Chronic	3.0E-02	mg/kg-day	92	3.0E-02	mg/kg-day	kidney effects	IRIS/ATSDR 1995/IRIS, TACO	02/08/2005
Bervllium	Chronic	2.0E-03	mg/kg-day	0.7	NC	mg/kg-day	sm. intestinal lesions	IRIS/USEPA 2004c/IRIS, TACO	02/08/2005
Chromium (3)	Chronic	3.0E-03	mg/kg-day	2.5	NC	mg/kg-day	none reported	IRIS/USEPA 2004c/IRIS, TACO	02/08/2005
Copper	Chronic	4.0E-02	mg/kg-day	NA	NC	mg/kg-day	CNS	Region III (5)/USEPA 2004c/IRIS, TACO	
Mercury	NA	NA	mg/kg-day	80	NA	mg/kg-day	immune system	IRIS/USEPA 2004c/IRIS, TACO	02/08/2005
Nickel (4)	Chronic	2.0E-02	mg/kg-day	4	NC	mg/kg-day	decreased body and organ weights	IRIS/USEPA 2004c/IRIS, TACO	02/08/2005
Thallium	Chronic	NA	mg/kg-day	100	NA	mg/kg-day	NA	IRIS/USEPA 2004c/IRIS, TACO	02/08/2005

Notes

- Adjusted Dermal RID = Oral RID * GI Absorption Efficiency. VOCs are evaluated in the inhalation exposure routes. No adjustment was performed for PAHs. RAGS Part E excludes all inorganic alanivtes except cadmium and arsenic from calculation of dermai risk (USEPA 2004c).
- (2) Date of most recent search of IRIS or morst recent Region III RBC table.
- (3) Toxicity value for Chromium VI particulates
- (4) Toxicity value for Nickel is for soluble saits.
- (5) USEPA Region III RBC Table dated 10/8/2004 provides EPA-NCEA or HEAST value (USEPA 2004b).

USEPA - United States Environmental Protection Agency.

ATSDR - Agency for Toxic Substances and Disease Registry.

IRIS - Integrated Risk Information System.

NA - Not Available.

TACO - Illinois EPA Tiered Approach to Corrective Action Objectives.

CNS - Central nervous system.

NC - Not calculated; excluded from dermal assessment.

Table 17a (Continued) Cancer Toxicity Data — Oral/Dermal Post-Remediation Resident

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Chemical	Oral Cancer	GI Absorption	Adjusted Dermal	Units	Weight of Evidence/	Source	Date (2)
of Potential	Slope Factor	Efficiency	Cancer		Cancer Guideline		(MM/DD/YYYY)
Concern		(%)	Slope Factor (1)		Description		
Acetone	NA	83	NA	(mg/kg-day) - i	D	IRIS/ATSDR 1992	02/08/2005
Benzene	5.5E-02	90	NC	(mg/kg-day) -1	A	IRIS/ATSDR 1995	02/08/2005
2-Butanone	NA	80	NA	(mg/kg-day) -1	D	IRIS/ATSDR 1992	02/08/2005
Ethylbenzene	NA	i	NA	(mg/kg-day - i	D	IRIS/ATSDR 1997	02/08/2005
o-Xvlene	NA	92	NA.	(mg/kg-day) -1	D	IRIS/ATSDR 1995	02/08/2005
Bis(2-ethylhexyl)phthalate	1.4E-02	NA	1.4E-02	(mg/kg-day) -1	B2	IRIS	02/08/2005
Carbazole	2.0E-02	70	2.0E-02	(mg/kg-day) -1	NA	IRIS/USEPA Region III/ USEPA 1986 (3)	002/08/2005, 10/8/2004
Acenaphthene	NA	NA	NA	(mg/kg-day) -1	NA	IRIS	02/08/2005
Acenaphthylene	NA	NA	NA	(mg/kg-day) - i	D	IRIS	02/08/2005
Anthracene	NA	71	NA	(mg/kg-day) -1	D	IRIS/ATSDR 1995	02/08/2005
Benzo(a)anthracene	7.3E-01	100	7.3E-01	(mg/kg-day) - i	B2	IRIS/USEPA Region III/ ATSDR 1990 (3)	002/08/2005, 10/8/2004
Benzo(b)fluoranthene	7.3E-01	NA	7.3E-01	(mg/kg-day) -i	B2	IRIS/USEPA Region III/ ATSDR 1990 (3)	002/08/2005, 10/8/2004
Benzo(k)fluoranthene	7.3E-02	NA	7.3E-02	(mg/kg-day) - i	B2	IRIS/USEPA Region III (3)	002/08/2005, 10/8/2004
Benzo(g,h,i)perylene	NA	NA	NA	(mg/kg-day) -i	D	IRIS	02/08/2005
Benzo(a)pyrene	7.3E+00	80	7.3E+00	(mg/kg-day) -1	B2	IRIS/ATSDR 1995	02/08/2005
Chrysene	7.3E-03	41	7.3E-03	(mg/kg-day) -1	B2	IRIS/USEPA Region III/ ATSDR 1990 (3)	002/08/2005, 10/8/2004
Dibenzo(a,h)anthracene	7.3E+00	90	7.3E+00	(mg/kg-day) -i	B2	IRIS/USEPA Region III/ ATSDR 1990 (3)	002/08/2005, 10/8/2004
Fluoranthene	NA	NA	NA	(mg/kg-day) - i	D	IRIS	02/08/2005
Fluorene	NA NA	NA	NA	(mg/kg-day) -1	D	IRIS/NA	02/08/2005
Indeno(1,2,3-cd)pyrene	7.3E-01	NA	7.3E-01	(mg/kg-day) -1	B2	IRIS/USEPA Region III (3)	002/08/2005, 10/8/2004
Naphthalene	NA	NA	NA	(mg/kg-day) -1	С	IRIS/ATSDR 1995	02/08/2005
Phenanthrene	NA	97	NA	(mg/kg-day) -i	D	IRIS/ATSDR 1995	02/08/2005
Pyrene	NA	92	NA	(mg/kg-day) -1	D	IRIS/ATSDR 1995	02/08/2005
Beryllium	NA	0.7	NA	(mg/kg-day) - i	Bl	IRIS/USEPA 2004c	02/08/2005
Chromium	NA	2.5	NA	(mg/kg-day) -1	D	IRIS/USEPA 2004c	02/08/2005
Copper	NA	NA	NA	(mg/kg-day) -1	D	IRIS	02/08/2005
Mercury	NA	80	NA	(mg/kg-day) -1	D	IRIS/USEPA 2004c	02/08/2005
Nickel	NA	4	NA	(mg/kg-day) -1	NA	IRIS/USEPA 2004c	02/08/2005
Thallium	NA	100	NA	(mg/kg-day) -1	NA	IRIS/USEPA 2004c	02/08/2005

Notes:

NA - Not Available.

IRIS - Integrated Risk Information System.

 $\label{eq:NCEA-National Center} \textbf{NCEA-National Center for Environmental Assessment}.$

USEPA - United States Environmental Protection Agency.

ATSDR - Agency for Toxic Substances and Disease Registry.

NC - Not calculated; excluded from dermal assessment.

USEPA Group:

- A Human carcinogen
- B1 Probable human carcinogen indicates that limited human data are available
- B2 Probable human carcinogen indicates sufficient evidence in animals and inadequate or no evidence in humans
- C Possible human carcinogen
- D Not classifiable as a numan carcinogen
- Adjusted Dermal SF = Oral SF * GI Absorption Efficiency. Benzene is evaluated in the inhalation exposure routes. No adjustment was performed for PAHs (RAGS Part E, USEPA 2004c).
- (2) Date of most recent search of IRIS or most recent Region III RBC table.
- (3) USEPA Region III RBC Table dated 10/8/2004 provides EPA-NCEA provisional oral cancer stope factor (USEPA 2004b).

Table 17b

Non-Cancer Toxicity Data -- Inhalation

Post-Remediation Resident

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Chemical	Chronic/	Value	Units	Adjusted	Units	Primary	Sources of	Date (3)
of Potential	Subchronic	Inhalation		Inhalation	'	Target	RfC:RfD/	(MM/DD/YYYY)
Concern		RfC		RfD (1, 2)		Organ	Target Organ	
Acetone	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Benzene	Chronic	3.0E-02	mg/m³	8.6E-03	mg/kg-day	Decreased lymphocyte count	IRIS/IRIS, TACO	02/08/2005
2-Butanone	Chronic	5.0E+00	mg/m³	1.4E+00	mg/kg-day	Developmental toxicity	IRIS/IRIS, TACO	02/08/2005
			-	i		(skeletal variations)		02/02/2005
Ethylbenzene	Chronic	1.0E+00	mg/m³	2.9E-01	mg/kg-day	kidney, liver, reproductive	IRIS/IRIS, TACO	02/08/2005
						system developmental toxicity		
o-Xylene	Chronic	i.0Œ-01	mg/m³	2.9E-02	mg/kg-day	impaired motor coordination	IRIS/IRIS, TACO	02/08/2005
Bis(2-ethylhexyl)phthalate	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Carbazole	NA	NA	mg/m³	ΝA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Acenaphthene	NA	NA	mg/m³	NA	mg/kg-day	liver	IRIS/IRIS, TACO	02/08/2005
Acenaphthylene	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS	02/08/2005
Anthracene	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS	02/08/2005
Benzo(a)anthracene	NA	NA	mg/m³	NA	mg/kg-day	NA NA	IRIS	02/08/2005
Benzo(b)fluoranthene	NA	NA	mg/m³	NA	mg/kg-day	NA NA	IRIS	02/08/2005
Benzo(k)fluoranthene	NA	NA	mg/m³	NA	mg/kg-day	NA NA	IRIS	02/08/2005
Benzo(g,h,i)perylene	NA	NA	mg/m³	NA	mg/kg-day	NA NA	IRIS	02/08/2005
Benzo(a)pyrene	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS	02/08/2005
Chrysene	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS	02/08/2005
Dibenzo(a,h)anthracene	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS	02/08/2005
Fluoranthene	NA	NA	mg/m³	NA	mg/kg-day	kidney, liver, circulatory	IRIS/IRIS, TACO	02/08/2005
		ļ				system	IDYCADIC TACO	02/08/2005
Fluorene	NA	NA	mg/m³	NA	mg/kg-day	circulatory system	IRIS/IRIS, TACO	02/08/2005
Indeno(1,2,3-cd)pyrene	NA	NA	mg/m³	NA	mg/kg-day	NA m	IRIS	02/08/2005
Naphthalene	Chronic	3.0E-03	mg/m³	NC	mg/kg-day	nasal effects, respiratory system	IRIS/IRIS, TACO	02/08/2005
Phenanthrene	NA	NA	mg/m³	NA	mg/kg-day	system NA	IRIS	02/08/2005
• • • • • • • • • • • • • • • • • • • •	NA NA	NA NA	mg/m³	NA NA	mg/kg-day	kidney	IRIS/IRIS, TACO	02/08/2005
Pyrene	Chronic	2.0E-05	mg/m²	NC NC	mg/kg-day	beryllium sensitization	IRIS/IRIS, TACO	02/08/2005
Beryllium	Chronic	1.0E-04	mg/m³	NC NC	mg/kg-day	lactate dehydrogenase in	IRIS/IRIS, TACO	02/08/2005
Chromium (4)	Сшоше	1.06-04	g/III-	1,40	mg, ng-uny	bronchioalveolar lavage fluid	<u> </u>	
Copper	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Mercury	Chronic	3.0E-04	mg/m³	8.6E-05	mg/kg-day	CNS, tremor, memory loss,	IRIS/IRIS, TACO	02/08/2005
			1			autonomic disfunction	IDICADIC TACC	02/08/2005
Nickel	NA	NA	mg/m³	l .	mg/kg-day	NA NA	IRIS/IRIS, TACO	02/08/2005
Thallium	NA	NA	mg/m³	NA	mg/kg-day	NA NA	IRIS/IRIS, TACO	02/08/2003

Notes

USEPA - United States Environmental Protection Agency.

IRIS - Integrated Risk Information System.

NA - Not Available.

NC - Not Converted.

TACO - Illinois EPA Tiered Approach to Corrective Action Objectives.

CNS - Central nervous system.

Adjusted Inhalation RfD = RfC * (20m³/day / 70 kg).

⁽²⁾ Inhalation RiC for naphthalene, beryllium and chromium are not converted to inhalation RiD since toxicity is at point of contact rather than systemic.

⁽³⁾ Date of most recent search of IRIS.

⁽⁴⁾ Toxicity value for Chromium VI particulates.

Table 17b (Continued)

Cancer Toxicity Data - Inhalation

Post-Remediation Resident

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Chemical	Unit Risk	Units	Adjustment (1)	Inhalation	Units	Weight of Evidence/	Source	Date (3)
of Potential				Cancer		Cancer Guideline		(MM/DD/YYYY)
Concern				Slope Factor (2)		Description		
Acetone	NA	(ug/m3) -i		NA	(mg/kg-day) -1	D	IRIS	02/08/2005
Benzene	7.8E-06	(ug/m3) -i	3,500	2.7E-02	(mg/kg-day) -1	A	IRIS	02/08/2005
2-Butanone	NA	(ug/m3) -1		NA	(mg/kg-day) - i	D	IRIS	02/08/2005
Ethylbenzene	NA	(ug/m3) -1		NA	(mg/kg-day) -1	D	IRIS	02/08/2005
o-Xylene	NA	(ug/m3) -i		NA	(mg/kg-day) - i	D	IRIS	02/08/2005
Bis(2-ethylhexyl)phthalate	NA	(ug/m3) -i		NA	(mg/kg-day) - i	B2	IRIS	02/08/2005
Carbazole	NA	(ug/m3) -1		NA	(mg/kg-day) - i	NA	IRIS	02/08/2005
Acenaphthene	NA	(ug/m3) -i		NA	(mg/kg-day) - i	NA	IRIS	02/08/2005
Acenaphthylene	NA	(ug/m3) -1		NA	(mg/kg-day) -i	D	IRIS	02/08/2005
Anthracene	NA	(ug/m3) -1		NA NA	(mg/kg-day) -i	D	IRIS	02/08/2005
Benzo(a)anthracene	8.8E-05	(ug/m3) -1		NC	(mg/kg-day) - i	B2	IRIS/Region III (4)	002/08/2005, 10/08/2004
Benzo(b)fluoranthene	8.8E-05	(ug/m3) -i		NC	(mg/kg-day) - i	B2	IRIS/Region III (4)	002/08/2005, 10/08/2004
Benzo(k)fluoranthene	8.8E-06	(ug/m3) -1		NC	(mg/kg-day) -i	B2	IRIS/Region III (4)	002/08/2005, 10/08/2004
Benzo(g,h,i)perylene	NA	(ug/m3) -i		NA	(mg/kg-day) -1	D	IRIS	02/08/2005
Benzo(a)pyrene	8.8E-04	(ug/m3) -1		NC	(mg/kg-day) - i	B2	IRIS/Region III (4)	002/08/2005, 10/08/2004
Chrysene	8.8E-07	(ug/m3) -1		NC	(mg/kg-day) -i	B2	IRIS/Region III (4)	002/08/2005, 10/08/2004
Dibenzo(a,h)anthracene	8.8E-04	(ug/m3) -1	i	NC	(mg/kg-day) -i	B2	IRIS/Region III (4)	002/08/2005, 10/08/2004
Fluoranthene	NA	(ug/m3) -1		NA	(mg/kg-day) -i	D	IRIS	02/08/2005
Fluorene	NA	(ug/m3) -1	İ	NA	(mg/kg-day) - i	D	IRIS	02/08/2005
Indeno(1,2,3-cd)pyrene	8.8E-05	(ug/m3) -1		NC	(mg/kg-day) - i	B2	IRIS/Region III (4)	002/08/2005, 10/08/2004
Naphthalene	NA	(ug/m3) -1		NA	(mg/kg-day) -1	С	IRIS	02/08/2005
Phenanthrene	NA	(ug/m3) -1		NA	(mg/kg-day) -1	D	IRIS	02/08/2005
Pyrene	NA	(ug/m3) -1		NA	(mg/kg-day) -1	D	IRIS	02/08/2005
Beryllium	2.4E-03	(ug/m3) -i	1	NC	(mg/kg-day) - i	B1	IRIS	02/08/2005
Chromium	1,2E-02	(ug/m3) -1		NC	(mg/kg-day) -1	A	IRIS	02/08/2005
Copper	NA	(ug/m3) -1		NA	(mg/kg-day) -1	D	IRIS	02/08/2005
Mercury	NA	(ug/m3) -i		NA	(mg/kg-day) -i	D	IRIS	02/08/2005
Nickel	NA	(ug/m3) -1		NA	(mg/kg-day) -i	NA	IRIS	02/08/2005
Thallium	NA	(ug/m3) -1		NA	(mg/kg-day) -1	NA	IRIS	02/08/2005

NOTES:

NA - Not Available.

IRIS - Integrated Risk Information System.

USEPA - United States Environmental Protection Agency.

NC - Not Converted.

- (1) Adjustment Factor applied to Unit Risk to calculate Inhalation Slope Factor. $= 70 kg \times 1/20 m^2/day \times 1000 ug/mg.$
- (2) Unit risk for carcinogenic PAHs, naphthatene, beryllium and chromium are not converted to stope factor since toxicity is at point of contact rather than systemic.
- (3) Date of most recent search of IRIS or most recent Region III RBC table.
- (4) USEPA Region III RBC Table dated 10/08/2004 provides USEPA-NCEA provisional inhalation UR for benzo(a)pyrene (USEPA 2004b). Other carcinogenic PAH URs are calculated using benzo(a)pyrene toxicity equivalency values.

USEPA Group:

- A Human carcinogen
- B1 Probable human carcinogen indicates that limited human data are available
- B2 Probable numan carcinogen indicates sufficient evidence in animals and inadequate or no evidence in humans
- C Possible human carcinogen
- D Not classifiable as a numan carcinogen
- E Evidence of noncarcinogenicity

Table 18a Noncancer Toxicity Data -- Oral/Dermat Post-Remediation Utility Worker and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Chemicai	Chronic/	Oral RfD	Oral RfD	GI Absorption	Adjusted	Units	Target	Sources of RfD/	Date (2)
of Potential	Subchrome	Value	Units	Efficiency	Dermai		Organ or	Absorption/	(MM/DD/YYYY)
Concern				(%)	RtD (1)		System	Target Organ	
Acetone	Subchronic	1.0E+00	mg/kg-day	83	NC	mg/kg-day	mcreased liver/kidney wt, nephrotoxicity	HEAST/ATSDR 1992/IRIS, TACO	July 1997
Benzene	Chronic	4.0E-03	mg/kg-day	90	NC	mg/kg-day	NA	IRIS/ATSDR 1995/ IRIS, TACO	02/08/2005
2-Butanone	Subchronic	2.0E+00	mg/kg-day	80	NC	mg/kg-day	decreased fetal birth rate	HEAST/ATSDR 1992/IRIS, TACO	July 1997
Ethylbenzene	Chronic	1.0E-01	mg/kg-day	92	NC	mg/kg-day	liver, kidney toxicity	IRIS/ATSDR 1997/IRIS, TACO	02/08/2005
o-Xylene	Chronic	2.0E-01	mg/kg-day	92	NC	mg/kg-day	CNS, hyperactivity, decreased body weight, increased mortality	IRIS/ATSDR 1995/IRIS, TACO	02/08/2005
Bis(2-ethylhexyl)phthalate	Chronic	2.00E-02	mg/kg-day	NA	2.0E-02	mg/kg-day	increased liver weight and tumors	IRIS/NA/IRIS, TACO	02/08/2005
Carbazole	NA	NA	mg/kg-day	70	NA	mg/kg-day	NA	IRIS/USEPA 1986/IRIS, TACO	02/08/2005
Acenaphthene	Subchrome	6.0E-01	mg/kg-day	NA.	6.0E-01	mg/kg-day	liver, hepatotoxicity	HEAST/NA/IRIS, TACO	July 1997
Acenaphthylene	NA	NA	mg/kg-day	NA	NA	mg/kg-day	NA NA	IRIS/NA/IRIS, TACO	02/08/2005
Anthracene	Subchronic	3.0E+00	mg/kg-day	71	3.0E+00	mg/kg-day	no observed effects	HEAST/ATSDR 1995/IRIS, TACO	July 1997
Benzo(a)anthracene	NA	NA	mg/kg-day	100	NA	mg/kg-day	NA.	IRIS/ATSDR 1990/IRIS, TACO	02/08/2005
Benzo(b)fluoranthene	NA.	NA	mg/kg-day	NA	NA	mg/kg-day	NA.	IRIS/ATSDR 1990/IRIS, TACO	02/08/2005
Benzo(k)fluoranthene	NA.	NA	mg/kg-day	NA	NA	mg/kg-day	NA.	IRIS/NA/IRIS, TACO	02/08/2005
Benzo(g,h,i)perylene	NA	NA	mg/kg-day	NA	NA	mg/kg-day	NA	IRIS/NA/IRIS, TACO	02/08/2005
Benzo(a)pyrene	NA	NA	mg/kg-day	80	NA	mg/kg-day	NA.	IRIS/ATSDR 1995/IRIS, TACO	02/08/2005
Chrysene	NA	NA	mg/kg-day	41	NA	mg/kg-day	NA	IRIS/ATSDR 1990/IRIS, TACO	02/08/2005
Dibenzo(a,h)anthracene	NA	NA	mg/kg-day	90	NA	mg/kg-day	NA NA	IRIS/ATSDR 1990/IRIS, TACO	02/08/2005
Fluoranthene	Subchrome	4.0E-01	mg/kg-day	NA	4.0Œ-01	mg/kg-day	kidney, nephropathy, increased liver wt, hematological alterations & clinical effects	HEAST/NA/IRIS, TACO	July 1997
Fluorene	Subchrome	4.0E-01	mg/kg-day	NA	4.0E-01	mg/kg-day	circulatory system, decreased RBC, packed cell volume & hemoglobin	HEAST/NA/IRIS, TACO	July 1997
Indeno(1,2,3-cd)pyrene	NA.	NA	mg/kg-day	NA	NA	mg/kg-day	NA NA	IRIS/NA/IRIS, TACO	02/08/2005
Naphthaiene	Chronic	2.0E-02	mg/kg-day	NA	2.0E-02	mg/kg-day	decreased mean terminal body wt	IRIS/ATSDR 1995/IRIS, TACO	02/08/2005
Phenanthrene	NA	NA	mg/kg-day	97	NA	mg/kg-day	NA.	IRIS/ATSDR 1995/IRIS, TACO	02/08/2005
Pyrene	Subchrome	3.0E-01	mg/kg-day	92	3.0E-01	mg/kg-day	kidney effects	HEAST/ATSDR 1995/IRIS, TACO	July 1997
Arsenic	Chronic/ Subchronic	3.0E-04	mg/kg-day	95	2.9E-04	mg/kg-day	Hyperpigmentation, keratosis and possible vascular complications	IRIS, HEAST/USEPA 2004c/IRIS, TACO	July 1997
Beryllium	Chronic/ Subchronic	5.0E-03	mg/kg-day	0.7	NC	mg/kg-day	sm, intestinal lesions	HEAST/USEPA 2004c/IRIS, TACO	July 1997
Cadmium	Chronic	1.0E-03	mg/kg-day	2,5	2.5E-05	mg/kg-day	kidney	IRIS/USEPA 2004c/IRIS, TACO	02/08/2005
Chromum (3)	Subchronic	2.0E-02	mg/kg-day	2.5	NC	mg/kg-day	none reported	HEAST/USEPA 2004c/IRIS, TACO	July 1997
Copper	Chronic	4.0E-02	mg/kg-day	NA	NC	mg/kg-day	NA	HEAST/NA/IRIS, TACO	July 1997
Lead	NA	NA	mg/kg-day	NA	NA	mg/kg-day	NA NA	IRIS/NA/IRIS, TACO	02/08/2005
Mercury	NA	NA	mg/kg-day	80	NA	mg/kg-day	ımmune system	IRIS/USEPA 2004c/IRIS, TACO	02/08/2005
Nickel (4)	Chronic/ Subchronic	2.0E-02	mg/kg-day	4	NC	mg/kg-day	decreased body and organ weights	IRIS, HEAST/USEPA 2004c/IRIS, TACO	2/8/2005, July 1997
Thallium	Chronic	NA	mg/kg-day	100	NA	mg/kg-day	NA.	IRIS/USEPA 2004c/IRIS, TACO	02/08/2005

(1) Adjusted Dermal RfD = Oral RfD * GI Absorption Efficiency. VOCs are evaluated in the inhalation exposure routes. No adjustment was performed for PAHs. RAGS Part E excludes all inorganic stanlytes except cadmium and arsenic from catculation of dermal risk (USEPA 2004c).

(2) Date of most recent search of IRIS.

(3) Toxicity value for Chromium VI particulates

(4) Toxicity value for Nickel is for soluble salts.

USEPA - United States Environmental Protection Agency.

ATSDR - Agency for Toxic Substances and Disease Registry.

IRIS - Integrated Risk Information System.

NA - Not Available.

TACO - Illinois EPA Tiered Approach to Corrective Action Objectives.

CNS - Central nervous system.

HEAST - Health Effects Assessment Summary Table. NC - Not calculated; excluded from dermal assessment

Table 18a (Continued) Cancer Toxicity Data — Oral/Dermal Post-Remediation Utility Worker and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Chemicai	Oral Cancer	GI Absorption	Adjusted Dermal	Units	Weight of Evidence/	Source	Date (2)
of Potential	Slope Factor	Efficiency	Cancer		Cancer Guideline		(MM/DD/YY)
Concern		(%)	Slope Factor (1)		Description		
Acetone	NA	83	NA	(mg/kg-day) - i	D	IRIS/ATSDR 1992	02/08/2005
Benzene	5.5E-02	90	NC	(mg/kg-day) - 1	A	IRIS/ATSDR 1995	02/08/2005
2-Butanone	NA	80	NA	(mg/kg-day) -1	D	IRIS/ATSDR 1992	02/08/2005
Ethylbenzene	NA	92	NA	(mg/kg-day) - 1	D	IRIS/ATSDR 1997	02/08/2005
o-Xylene	NA.	92	NA.	(mg/kg-day) - I	D	IRIS/ATSDR 1995	02/08/2005
Bis(2-ethylhexyl)phthalate	i.4E-02	NA	1.4E-02	(mg/kg-day) -1	B2	IRIS	02/08/2005
Carbazoie	2.0E-02	70	2.0E-02	(mg/kg-day) -1	NA	USEPA Region III/ USEPA 1986 (3)	10/08/2004
Acenaphthene	NA	NA.	NA	(mg/kg-day) - 1	NA	IRIS	02/08/2005
Acenaphthylene	NA.	NA	NA.	(mg/kg-day) - 1	D	IRIS	02/08/2005
Anthracene	NA.	71	NA NA	(mg/kg-day)	D	IRIS/ATSDR 1995	02/08/2005
Benzo(a)anthracene	7.3E-01	100	7.3E-01	(mg/kg-day) -1	B2	IRIS/USEPA Region III/ ATSDR 1990(3)	002/08/2005, 10/8/2004
Benzo(b)fluoranthene	7.3E-01	NA	7.3E-01	(mg/kg-day) -i	B2	IRIS/USEPA Region III/ ATSDR 1990(3)	002/08/2005, 10/8/2004
Benzo(k)fluoranthene	7.3E-02	NA	7.3E-02	(mg/kg-day) - 1	B2	IRIS/USEPA Region III (3)	002/08/2005, 10/8/2004
Benzo(g,h,i)perytene	NA	NA.	NA	(mg/kg-day) -:	D	IRIS	02/08/2005
Benzo(a)pyrene	7.3E+00	80	7.3E+00	(mg/kg-day) -1	B2	IRIS/ATSDR 1995	02/08/2005
Chrysene	7.3E-03	41	7.3E-03	(mg/kg-day) - 1	B2	IRIS/USEPA Region III/ ATSDR 1990(3)	002/08/2005, 10/8/2004
Dibenzo(a,h)anthracene	7.3E+00	90	7.3E+00	(mg/kg-day) - i	B2	IRIS/USEPA Region III/ ATSDR 1990(3)	002/08/2005, 10/8/2004
Fluoranthene	NA	NA	NA	(mg/kg-day) - 1	D	IRIS	02/08/2005
Fluorene	NA.	NA	NA	(mg/kg-day) - 1	D	IRIS/NA	02/08/2005
Indeno(1,2,3-cd)pyrene	7.3E-01	NA.	7.3E-01	(mg/kg-day) -1	B2	IRIS/USEPA Region III (3)	002/08/2005, 10/8/2004
Naphthaiene	NA.	NA.	NA	(mg/kg-day) -1	С	IRIS/ATSDR 1995	02/08/2005
Phenanthrene	NA	97	NA	(mg/kg-day) -	D	IRIS/ATSDR 1995	02/08/2005
Pyrene	NA	92	NA	(mg/kg-day) -i	D	IRIS/ATSDR 1995	02/08/2005
Arsenic	1.5E+00	95	1.6E+00	(mg/kg-day) -	A	IRIS/USEPA 2004c	02/08/2005
Beryllium	NA	0.7	NA	(mg/kg-day) -	B1	IRIS/USEPA 2004c	02/08/2005
Cadmium	NA	2.5	NA	(mg/kg-day) -1	B1	IRIS/USEPA 2004c	02/08/2005
Chromium	NA	2.5	NA	(mg/kg-day) -i	D	IRIS/USEPA 2004c	02/08/2005
Copper	NA	NA	NA	(mg/kg-day)	Œ	IRIS	02/08/2005
Lead	NA	NA	NA	(mg/kg-day) -1	B2	IRIS	02/08/2005
Mercury	NA.	80	NA	(mg/kg-day) - i	D	IRIS/USEPA 2004c	02/08/2005
Nickei	NA.	4	NA	(mg/kg-day)	NA	IRIS/USEPA 2004c	02/08/2005
Thallium	NA.	100	NA	(mg/kg-day) -1	NA	IRIS/USEPA 2004c	02/08/2005

Notes

NA - Not Available.

IRIS - Integrated Risk Information System.

NCEA - National Center for Environmental Assessment.
USEPA - United States Environmental Protection Agency.

ATSDR - Agency for Toxic Substances and Disease Registry.

NC - Not calculated; excluded from dermal assessment.

USEPA Group:

- A Human carcinogen
- B1 Probable human carcinogen indicates that limited human data are available
- B2 Probable human carcinogen indicates sufficient evidence in animais and inadequate or no evidence in humans
- C Possible human carcinogen
- D Not classifiable as a human carcinogen
- Adjusted Dermal SF = Oral SF * GI Absorption Efficiency. Benzene is evaluated in the inhalation exposure routes. No adjustment was performed for PAHs (RAGS Part E, USEPA 2004c).
- (2) Date of most recent search of IRIS or most recent EPA-NCEA provisional value.
- (3) USEPA Region III RBC Table dated 10/8/2004 provides EPA-NCEA provisional or HEAST oral cancer slope factor (USEPA 2004b).

Former Willow Street Station - RA 2 of 2 November 2005

Table 18b

Noncancer Toxicity Data -- Inhalation Post-Remediation Utility Worker and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Chemicai	Chronic/	Value	Units	Adjusted	Units	Primary	Sources of	Date (3)
of Potential	Subchrome	Inhalation		Inhalation		Target	RfC:RfD/	(MM/DD/YYYY)
Concern	J	RfC		RfD (1, 2)		Organ	Target Organ	
Acetone	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Benzene	Chronic	3.0E-02	mg/m³	8.6E-03	mg/kg-day	decreased fetal birth rate	IRIS/IRIS, TACO	02/08/2005
2-Butanone	Subchronic	1.0E+00	mg/m³	2.9E-01	mg/kg-day	Developmental toxicity (skeletal variations)	HEAST/IRIS, TACO	July 1997
Ethylbenzene	Chronic	1.0E+00	mg/m³	2.9E-01	mg/kg-day	kidney, liver, reproductive system, developmental toxicity	IRIS/IRIS, TACO	02/08/2005
o-Xylene	Chronic	1.0E-01	mg/m³	2.9E-02	mg/kg-day	impaired motor coordination	IRIS/IRIS, TACO	02/08/2005
Bis(2-ethylhexyl)phthalate	NA	NA	mg/m³	NA	mg/kg-day	NA NA	IRIS/IRIS, TACO	02/08/2005
Carbazole	NA.	NA	mg/m³	NA	mg/kg-day	NA.	IRIS/IRIS, TACO	02/08/2005
Acenaphthene	NA	NA	mg/m³	NA	mg/kg-day	liver	IRIS/IRIS, TACO	02/08/2005
Acenaphthylene	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Anthracene	NA	NA	mg/m³	ŇΑ	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Benzo(a)anthracene	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Benzo(b)fluoranthene	NA	NA	mg/m³	NA	mg/kg-day	NA NA	IRIS/IRIS, TACO	02/08/2005
Benzo(k)fluoranthene	NA	NA	mg/m³	NA	mg/kg-day	NA NA	IRIS/IRIS, TACO	02/08/2005
Benzo(g,h,i)perytene	NA.	NA	mg/m³	NA	mg/kg-day	NA NA	IRIS/IRIS, TACO	02/08/2005
Benzo(a)pyrene	NA	NA	mg/m³	NA	mg/kg-day	NA.	IRIS/IRIS, TACO	02/08/2005
Chrysene	NA	NA	mg/m³	NA	mg/kg-day	NA.	IRIS/IRIS, TACO	02/08/2005
Dibenzo(a,h)anthracene	NA	NA	mg/m³	NA	mg/kg-day	NA.	IRIS/IRIS, TACO	02/08/2005
Fluoranthene	NA	NA	mg/m³	NA	mg/kg-day	kidney, liver, circulatory system	IRIS/IRIS, TACO	02/08/2005
Fluorene	NA	NA	mg/m³	NA	mg/kg-day	circulatory system	IRIS/IRIS, TACO	02/08/2005
Indeno(1,2,3-cd)pyrene	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Naphthaiene	Chronic	3.0E-03	mg/m³	NC	mg/kg-day	nasai effects, respiratory system	IRIS/IRIS, TACO	02/08/2005
Phenanthrene	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Pyrene	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Arsenic	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Beryllium	Chrome	2.0E-05	mg/m³	NC	mg/kg-day	beryllium sensitization	IRIS/IRIS, TACO	02/08/2005
Cadmium	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Chromium (4)	Chronic	1.0E-04	mg/m³	NC	mg/kg-day	lactate dehydrogenase in bronchioalveolar lavage fluid	IRIS/IRIS, TACO	02/08/2005
Copper	NA	NA	mg/m³	NA	mg/kg-day	NA NA	IRIS/IRIS, TACO	02/08/2005
Lead	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Mercury	Chronic/ Subchronic	3.0E-04	mg/m³	8.6E-05	mg/kg-day	CNS, tremor, memory toss, autonomic disfunction	RIS, HEAST/IRIS, TACC	002/08/2005, July 199
Nicket	NA	NA	mg/m³	NA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005
Thallium	NA.	NA.	mg/m³	NA	mg/kg-day	NA	IRIS/IRIS, TACO	02/08/2005

(1) Adjusted Inhalation RfD = RfC * (20m\/day / 70 kg).

(2) Inhalation RfC for naphthalene, bervilium and chromium are not converted to inhalation RfD

since toxicity is at point of contact rather than systemic.

(3) Date of most recent search of IRIS.

(4) Toxicity value for Chromium VI particulates.

USEPA - United States Environmental Protection Agency.

IRIS - Integrated Risk Information System.

NA - Not Available.

NC - Not Converted.

TACO - Illinois EPA Tiered Approach to Corrective Action Objectives.

CNS - Central nervous system.

HEAST - Health Effects Assessment Summary Table.

Table 18b (Continued)

Cancer Toxicity Data -- Inhalation

Post-Remediation Utility Worker and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Chemical	Unit Risk	Units	Adjustment (1)	Inhalation	Units	Weight of Evidence/	Source	Date (3)
of Potential		i		Cancer		Cancer Guideline		(MM/DD/YYYY)
Concern				Slope Factor (2)		Description		
Acetone	NA	(ug/m3) -1		NA	(mg/kg-day) -1	D	IRIS	02/08/2005
Benzene	7.8E-06	(ug/m3) -1	3,500	2.7E-02	(mg/kg-day) - 1	A	IRIS	02/08/2005
2-Butanone	NA	(ug/m3) -1		NA.	(mg/kg-day) -1	D	IRIS	02/08/2005
Ethylbenzene	NA	(ug/m3) -1		NA	(mg/kg-day) -	D	IRIS	02/08/2005
o-Xylene	NA	(ug/m3) -1		NA	(mg/kg-day)	D	IRIS	02/08/2005
Bis(2-ethylhexyl)phthalate	NA	(ug/m3) -i		NA	(mg/kg-day) -i	B2	IRIS	02/08/2005
Carbazoie	NA	(ug/m3) -1		NA	(mg/kg-day) -1	NA	IRIS	02/08/2005
Acenaphthene	NA	(ug/m3) -i		NA	(mg/kg-day) -i	NA NA	IRIS	02/08/2005
Acenaphthylene	NA	(ug/m3) -1		NA NA	(mg/kg-day) -1	D	IRIS	02/08/2005
Anthracene	NA	(ug/m3) -1		NA NA	(mg/kg-day) - i	D	IRIS	02/08/2005
Benzo(a)anthracene	8.8E-05	(ug/m3) -1		NC	(mg/kg-day) - 1	B2	IRIS/Region III (4)	002/08/2005, 10/8/2004
Benzo(b)fluoranthene	8.8E-05	(ug/m3) -1		NC	(mg/kg-day) - 1	B2	IRIS/Region III (4)	002/08/2005, 10/8/2004
Benzo(k)fluoranthene	8.8E-06	(ug/m3) -1		NC	(mg/kg-day) - 1	B2	IRIS/Region III (4)	002/08/2005, 10/8/2004
Benzo(g,h,i)perylene	NA	(ug/m3) -1		NA	(mg/kg-day) -1	D	IRIS	02/08/2005
Benzo(a)pyrene	· 8.8E-04	(ug/m3) -1		NC	(mg/kg-day) -1	B2	IRIS/Region III (4)	002/08/2005, 10/8/2004
Chrysene	8.8E-07	(ug/m3) -1		NC	(mg/kg-day) -1	B2	IRIS/Region III (4)	002/08/2005, 10/8/2004
Dibenzo(a,h)anthracene	8.8E-04	(ug/m3) -1		NC	(mg/kg-day) -1	B2	IRIS/Region III (4)	002/08/2005, 10/8/2004
Fluoranthene	NA	(ug/m3) -i		NA	(mg/kg-day)	D	IRIS	02/08/2005
Fluorene	NA	(ug/m3) -1		NA	(mg/kg-day)	D	IRIS	02/08/2005
Indeno(1,2,3-cd)pyrene	8.8E-05	(ug/m3) -1		NC	(mg/kg-day) - i	B2	IRIS/Region III (4)	002/08/2005, 10/8/2004
Naphthaiene	NA	(ug/m3) -1		NA	(mg/kg-day) - 1	С	IRIS	02/08/2005
Phenanthrene	NA.	(ug/m3) -1		NA	(mg/kg-day) - 1	D	IRIS	02/08/2005
Pyrene	NA	(ug/m3) -1		NA	(mg/kg-day) - i	D	IRIS	02/08/2005
Arsenic	4.3E-03	(ug/m3) -1	i	NC	(mg/kg-day) -1	A	IRIS	02/08/2005
Beryllium	2.4E-03	(ug/m3) -i		NC	(mg/kg-day) -1	B1	IRIS	02/08/2005
Cadmium	1.8E-03	(ug/m3) -1		NC	(mg/kg-day) -1	B1	IRIS	02/08/2005
Chromium (4)	1.2E-02	(ug/m3) -1		NC	(mg/kg-day)	A	IRIS	02/08/2005
Copper	NA	(ug/m3) -1		NA	(mg/kg-day) -1	D	IRIS	02/08/2005
Lead	NA	(ug/m3) -		NA	(mg/kg-day) -	B2	IRIS	02/08/2005
Mercury	NA	(ug/m3) -1		NA.	(mg/kg-day) -i	α	IRIS	02/08/2005
Nickel (5)	NA.	(ug/m3) -1		NA	(mg/kg-day) -1	NA	IRIS	02/08/2005
Thallium	NA	(ug/m3) -1		NA	(mg/kg-day) -i	NA	IRIS	02/08/2005

NOTES:

NA - Not Available. IRIS - Integrated Risk Information System.

USEPA - United States Environmental Protection Agency.

NC - Not Converted.

- Adjustment Factor applied to Unit Risk to calculate Inhalation Slope Factor.
 70kg x 1/20m³/day x 1000ug/ng.
- (2) Unit risk for caroinogenic PAHs, naphthalene, beryllium, cadmium and chromium are not converted to slope factor since toxicity is at point of contact rather than systemic.
- (3) Date of most recent search of IRIS or most recent EPA-NCEA provisional value.
- (4) USEPA Region III RBC Table dated 10.08/2004 provides USEPA-NCEA provisional inhalation UR for benzo(a)pyrene (USEPA 2004b). Other carcanogenic PAH URs are calculated using benzo(a)pyrene toxicity equivalency values.

USEPA Group: A - Human carcinogen

- B1 Probable human carcinogen indicates that limited human data are available
- B2 Probable human carcinogen indicates sufficient evidence in animals and inadequate or no evidence in humans
- C Possible human caromogen
- D Not classifiable as a human carcinogen
- E Evidence of noncarcanogenicity

Former Willow Street Statuon - RA
November 2005

Table 19a

Values Used For Daily Intake Calculations Post-Remediation Adult Resident

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Surface/Subsurface Soil*

Exposure Point: Surface Soil* Receptor Population: Resident Receptor Age: Adult

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	CT Value	CT Rationale/ Reference	Intake Equation
Ingestion	CS	Chemical Concentration in Soil	mg/kg	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	Daily Intake (DI) (mg/kg-day) =
	IR	Ingestion Rate of Soil	mg/day	100	USEPA 1997a	50	USEPA 1997a	CS x IR x EF x ED x FI x CF x 1/BW x 1/AT
	FΙ	Fraction Ingested		1	USEPA 1989	1	USEPA 1989	
1	EF	Exposure Frequency	days/year	350	USEPA 1991	350	USEPA 1991	
	ED	Exposure Duration	years	24	USEPA 1991	7	USEPA 1993	
	CF	Conversion Factor (mg to kg)	kg/mg	1E-06		1E-06		
	BW	Body Weight	kg	70	USEPA 1991	70	USEPA 1991	
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	10,950	USEPA 1991	3,285	USEPA 1991	
Dermal	CS	Chemical Concentration in Soil	mg/kg	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	1
	CF	Conversion Factor (mg to kg)	kg/mg	1E-06		1E-06		CS x SA x CF x AF x ABS x EF x ED x 1/BW x 1/AT
	AF	Soil to Skin Adherence Factor	mg/cm ²	0.07	USEPA 2004c	0.01	USEPA 2004c	
	ABS	Absorption Factor		Chemical Specific See Tables 21 and 29	USEPA 2004c	Chemical Specific See Table 25 and 33	USEPA 2004c	
	SA	Skin Surface Area Available for Contact	cm ²	5,700	USEPA 2004c	5,700	USEPA 2004c	
	EF	Exposure Frequency	days/years	350	USEPA 1991	350	USEPA 1991	
	ED	Exposure Duration	years	24	USEPA 1991	7	USEPA 1993	
	BW	Body Weight	kg	70	USEPA 1991	70	USEPA 1991	
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	10,950	USEPA 1991	3,285	USEPA 1991	

Note

(1) * For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

SOURCES:

USEPA 1989: Risk Assessment Guidance for Superfund. Vol.1: Human Health Evaluation Manual (Part A). Interim Final. EPA/540/1-89/002, December.

USEPA 1991: Risk Assessment Guidance for Superfund. Vol.1: Human Health Evaluation Manual - Supplemental Guidance, Standard Default Exposure Factors. Interum Final. OSWER Directive 9285.6-03, March 15.

 $USEPA\ 1993: Superfund's\ Standard\ Default\ Exposure\ Factors\ for\ the\ Central\ Tendency\ and\ Reasonable\ Maximum\ Exposure,\ November\ 4.$

USEPA 1997a: Exposure Factors Handbook: Volume I - General Factors, August.

USEPA 2004c: Risk Assessment Guidance for Superfund. Vol.1: Human Health Evaluation Manual Part E - Supplemental Guidance for Dermal Risk Assessment, Final. OSWER Directive 9285.7-02EP, July.

Table 19a (Continued)

Values Used For Daily Intake Calculations

Post-Remediation Adult Resident

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Surface/Subsurface Soil*

Exposure Point: Surface Soil* Receptor Population: Resident Receptor Age: Adult

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	CT Value	CT Rationale/ Reference	Intake Equation
Inhalation of	CS	COPC Concentration in Soil	mg/kg	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	DI (mg/kg-day) =
Fugitive Dust	IR	Inhalation Rate	m ³ /day	15.2	USEPA 1991	20	USEPA 1991	CS x IR x EF x ED/BW x AT x PEF
	PEF	Particulate Emission Factor	m³/kg	1.32E+09	IAC 2002	1.32E+09	IAC 2002	
	EF	Exposure Frequency	days/year	350	USEPA 1991	350	USEPA 1991	DI for use with RfC/UR (mg/m³) =
	ED	Exposure Duration	years	24	USEPA 1991	7	USEPA 1993	CS x EF x ED/AT x PEF
1	ВW	Body Weight	kg	70	USEPA 1991	70	USEPA 1991	
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	10,950	USEPA 1991	3,285	USEPA 1991	
Inhalation of	CS	COPC Concentration in Soil	mg/kg	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	DI (mg/kg-day) =
Chemicals	VF	Volatilazion Factor	m ³ /kg	See Table 14	See Tables 13 and 14	See Table 14	See Tables 13 and 14	CS x IR x EF x ED/(BW x AT x VF)
in Vapor	IR	Inhalation Rate	m³/day	15.2	USEPA 1991	20	USEPA 1991	
Phase	EF	Exposure Frequency	days/year	350	USEPA 1991	350	USEPA 1991	DI for use with RfC/UR (mg/m³) =
	ED	Exposure Duration	years	24	USEPA 1991	7	USEPA 1993	CS x EF x ED/(AT x VF)
	вw	Body Weight	kg	70	USEPA 1991	70	USEPA 1991	
1	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	10,950	USEPA 1991	3,285	USEPA 1991	

Note:

SOURCES:

Illinois Administrative Code (IAC), 2002: Title 35: Environmental Protection, Subtitle G, Chapter I, Pollution Control Board, Subchapter f, Part 742: Tiered Approach to Corrective Action Objectives (TACO), Appendix C, Table B, February.

USEPA 1991: Risk Assessment Guidance for Superfund. Vol.1: Human Health Evaluation Manual - Supplemental Guidance, Standard Default Exposure Factors. Interim Final. OSWER Directive 9285.6-03, March 15.

 $USEPA\ 1993:\ Superfund's\ Standard\ Default\ Exosure\ Factors\ for\ the\ Central\ Tendency\ and\ Reasonable\ Maximum\ Exposure,\ November\ 4.$

USEPA 1997a: Exposure Factors Handbook: Volume 1 - General Factors, August.

^{(1) *} For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

Table 19b

Values Used For Daily Intake Calculations Post-Remediation Child Resident

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Surface/Subsurface Soil*

Exposure Point: Surface Soil* Receptor Population: Resident Receptor Age: Child

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	CT Value	CT Rationale/ Reference	Intake Equation
Ingestion	CS	Chemical Concentration in Soil	mg/kg	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	Daily Intake (DI) (mg/kg-day) =
	IR.	Ingestion Rate of Soil	mg/day	200	USEPA 1991	100	USEPA 1993	CS x IR x EF x ED x FI x CF x 1/BW x 1/AT
	FI	Fraction Ingested		1	USEPA 1989	1	USEPA 1989	
	EF	Exposure Frequency	days/year	350	USEPA 1991	350	USEPA 1991	
	ED	Exposure Duration	years	6	USEPA 1991	2	USEPA 1993	
	CF	Conversion Factor (mg to kg)	kg/mg	1E-06		1E-06		
	BW	Body Weight	kg	15	USEPA 1991	15	USEPA 1991	
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	10,950	USEPA 1991	3,285	USEPA 1991	
Dermai	CS	Chemical Concentration in Soil	mg/kg	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	DI (mg/kg-day) =
	CF	Conversion Factor (mg to kg)	kg/mg	1E-06		1E-06		CS x SA x CF x AF x ABS x EF x ED x 1/BW x 1/AT
	AF	Soil to Skin Adherence Factor	mg/cm ²	0.2	USEPA 2004c	0.04	USEPA 2004c	
	ABS	Absorption Factor		Chemical Specific See Tables 21 and 29	USEPA 2004c	Chemical Specific See Table 25 and 33	USEPA 2004c	
	SA	Skin Surface Area Available for Contact	cm ²	2,800	USEPA 2004c	2,800	USEPA 2004c	
	EF	Exposure Frequency	days/years	350	USEPA 1991	350	USEPA 1991	
	ED	Exposure Duration	years	6	USEPA 1991	2	USEPA 1993	
	BW	Body Weight	kg	15	USEPA 1991	15	USEPA 1991	
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	10,950	USEPA 1991	3,285	USEPA 1991	

Note:

(1) * For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

SOURCES:

USEPA 1989: Risk Assessment Guidance for Superfund. Vol.1: Human Health Evaluation Manual (Part A). Interim Final. EPA/540/1-89/002, December.

USEPA 1991: Risk Assessment Guidance for Superfund. Vol.1: Human Health Evaluation Manuai - Supplemental Guidance, Standard Default Exposure Factors. Interim Final. OSWER Directive 9285.6-03, March 15.

USEPA 1993: Superfund's Standard Default Exposure Factors for the Central Tendency and Reasonable Maximum Exposure, November 4.

USEPA 1997a: Exposure Factors Handbook: Volume I - General Factors, August.

USEPA 2004c: Risk Assessment Guidance for Superfund. Vol.1: Human Health Evaluation Manual Part E - Supplemental Guidance for Dermal Risk Assessment, Final. OSWER Directive 9285.7-02EP, July.

Table 19b (Continued)

Values Used For Daily Intake Calculations

Post-Remediation Child Resident

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Surface/Subsurface Soil*

Exposure Point: Surface Soil*
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	CT Value	CT Rationale/ Reference	Intake Equation
Inhalation of	CS	COPC Concentration in Soil	mg/kg	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	DI (mg/kg-day) =
Fugitive Dust	IR	Inhalation Rate	m ³ /day	10	USEPA 1997a	10	USEPA 1997a	CS x IR x EF x ED/BW x AT x PEF
	PEF	Particulate Emission Factor	m ³ /kg	1.32E+09	IAC 2002	1.32E+09	IAC 2002	
	EF	Exposure Frequency	days/year	350	USEPA 1991	350	USEPA 1991	DI for use with RfC/UR $(mg/m^3) =$
	ED	Exposure Duration	years	6	USEPA 1991	2	USEPA 1993	CS x EF x ED/AT x PEF
	BW	Body Weight	kg	15	USEPA 1991	15	USEPA 1991	
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	10,950	USEPA 1991	3,285	USEPA 1991	
Inhalation of	CS	COPC Concentration in Soil	mg/kg	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	See Tables 9 and 10	DI (mg/kg-day) =
Chemicals	VF	Volatilazion Factor	m ³ /kg	See Table 14	See Tables 13 and 14	See Table 14	See Tables 13 and 14	CS x IR x EF x ED/(BW x AT x VF)
in Vapor	IR	Inhalation Rate	m³/day	10	USEPA 1997a	10	USEPA 1997a	
Phase	EF	Exposure Frequency	days/year	350	USEPA 1991	350	USEPA 1991	DI for use with RfC/UR (mg/m ³) =
	ED	Exposure Duration	years	6	USEPA 1991	2	USEPA 1993	CS x EF x ED/(AT x VF)
	BW	Body Weight	kg	15	USEPA 1991	15	USEPA 1991	
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	10,950	USEPA 1991	3,285	USEPA 1991	

Note

(1) * For future resident scenario, subsurface soil is assumed potentially to be redistributed to the surface.

SOURCES:

Illinois Administrative Code (IAC), 2002: Title 35: Environmental Protection, Subtitle G, Chapter I, Pollution Control Board, Subchapter f, Part 742: Tiered Approach to Corrective Action Objectives (TACO), Appendix C, Table B, February.

USEPA 1991: Risk Assessment Guidance for Superfund. Vol.1: Human Health Evaluation Manual - Supplemental Guidance, Standard Default Exposure Factors. Interim Final. OSWER Directive 9285.6-03, March 15.

USEPA 1993: Superfund's Standard Default Exosure Factors for the Central Tendency and Reasonable Maximum Exposure, November 4.

USEPA 1997a: Exposure Factors Handbook: Volume i - General Factors, August.

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Incidental Ingestion of Soil

Reasonable Maximum Exposure (RME)

Post-Remediation Resident 1

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Chronic Nonca	rcinogenic Effec	ts		Lifetime C	arcinogenic Effec	ets
	RME	Human			Hazard	Human		Oral	
Chemicals	Conc	Intake Factor	Daily	Oral	Quotient	Intake Factor	Daily	Slope	
of	(CS)	(HIF)	Intake	RfD	(HQ)	(HIF)	Intake	Factor	Risk
Potential Concern	mg/kg	kg/kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day)-1	unitless
Acetone	0 164	3.65E-06	5.99E-07	9.0E-01	7E-07	1 57E-06	2.57E-07		
Benzene	0 008	3.65E-06	2.92E-08	4.0E-03	7E-06	1 57E-06	1 25E-08	5 5E-02	7E-10
2-Butanone	0 044	3.65E-06	1.61E-07	6.0E-01	3E-07	1 57E-06	6 89E-08		
Ethylbenzene	0 027	3.65E-06	9.86E-08	1.0E-01	1E-06	1 57E-06	4 23E-08	ļ	
o-Xylene	0 016	3.65E-06	5.84E-08	2.0E-01	3E-07	1 57E-06	2 50E-08		
Bis(2-ethylhexyl)phthalate	0 266	3.65E-06	9.72E-07	2.0E-02	5E-05	1 57E-06	4 16E-07	1.4E-02	6E-09
Carbazole	0 271	3.65E-06	9.90E-07			1.57E-06	4 24E-07	2.0E-02	8E-09
Acenaphthene	0 118	3.65E-06	4.31E-07	6.0E-02	7E-06	1.57E-06	1 85E-07		
Acenaphthylene	0 084	3.65E-06	3.07E-07			1.57E-06	1 32E-07		
Anthracene	0.198	3.65E-06	7.23E-07	3.0E-01	2E-06	1.57E-06	3 10E-07		
Benzo(a)anthracene	0.288	3.65E-06	1.05E-06			1 57E-06	4 51E-07	7.3E-01	3E-07
Benzo(b)fluoranthene	0 258	3.65E-06	9.42E-07			1.57E-06	4.04E-07	7.3E-01	3E-07
Benzo(k)fluoranthene	0.254	3.65E-06	9.28E-07			1 57E-06	3.98E-07	7.3E-02	3E-08
Benzo(g,h,i)perylene	0.331	3.65E-06	1.21E-06			1.57E-06	5.18E-07		
Benzo(a)pyrene	0.299	3.65E-06	1.09E-06			1.57E-06	4.68E-07	7.3E+00	3E-06
Chrysene	0.513	3.65E-06	1.87E-06			1.57E-06	8.03E-07	7.3E-03	6E-09
Dibenzo(a,h)anthracene	0.103	3.65E-06	3.76E-07			1.57E-06	1.61E-07	7.3E+00	1E-06
Fluoranthene	0 734	3.65E-06	2.68E-06	4.0E-02	7E-05	1.57E-06	1.15E-06		
Fluorene	0.194	3.65E-06	7.09E-07	4 0E-02	2E-05	1.57E-06	3.04E-07		
Indeno(1,2,3-cd)pyrene	0.242	3.65E-06	8.84E-07			1.57E-06	3.79E-07	7 3E-01	3E-07
Naphthalene	0.175	3.65E-06	6.39E-07	2 0E-02	3E-05	1 57E-06	2 74E-07		
Phenanthrene	0.554	3.65E-06	2.02E-06			1.57E-06	8.67E-07		
Pyrene	0.998	3.65E-06	3.65E-06	3 0E-02	1E-04	1 57E-06	1.56E-06		
Beryllium	1.178	3.65E-06	4.30E-06	2 0E-03	2E-03	1 57E-06	1 84E-06		
Chromium*	19 389	3.65E-06	7.08E-05	3 0E-03	2E-02	1 57E-06	3 04E-05		
Copper	32.712	3.65E-06	1.19E-04	4.0E-02	3E-03	1 57E-06	5 12E-05	1	
Mercury	0.166	3.65E-06	6.06E-07			1 57E-06	2 60E-07	1	
Nickel	34.373	3.65E-06	1.26E-04	2 0E-02	6E-03	1 57E-06	5 38E-05		
Thallium	2.537	3.65E-06	9.27E-06			1.57E-06	3.97E-06		
		Total Pathway I	Hazard Index	>	4E-02		6E-06		

INCIDENTAL INGESTION OF SOIL

CS = Concentration of chemical in soil (mg/kg) See Table 9

1 00E-06 CF = 0 000001 kg/mg - Conversion Factor

1 00E+02 IRa = 100 mg/day - Ingestion Rate of soil by an adult, (USEPA 1991)

 $2.00\mbox{E+}02$ IRc = 200 mg/day - Ingestion Rate of soil by a child, (USEPA 1991)

2 40E+01 EDa = 24 yr - Exposure Duration for an adult, (USEPA 1991)

6 00E+00 EDc = 6 yr - Exposure Duration for an adult, (USEPA 1991)

3 50E+02 EFa = 350 days/yr - Exposure Frequency for an adult, (USEPA 1991) 3 50E+02 EFc = 350 days/yr - Exposure Frequency for a child, (USEPA 1991)

7 00E+01 BWa = 70 kg - Body Weight for an adult, (USEPA 1991)

1 50E+01 BWc = 15 kg - Body Weight for a child, (USEPA 1991)

1 095E+04 ATn = 10,950 days - Averaging Time for noncarcinogenic compounds, (USEPA 1991)

2 555E+04 ATc = 25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

1 00E+00 FIa = 1 - Fraction Ingested, (USEPA 1989)

1 00E+00 Fic = 1 - Fraction Ingested, (USEPA 1989)

3 65E-06 HIF = ((IRa * EFa * EDa * FIa / BWa) + (IRc * EFc * EDc * FIc / BWc)) * CF / (AIn)

1 57E-06 HIF = ((IRa * EFa * EDa * Fla / BWa) + (IRc * EFc * EDc * Flc / BWc)) * CF / (AIc)

DAILY INTAKE = (CS * HIF)

HIF-NONCARCINOGENIC----

HIF-CARCINOGENIC--

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

^{*} Chromium concentration is total chromium, RfD is for chromium VI particulates.

Dermal Contact with Soil

Reasonable Maximum Exposure (RME)

Post-Remediation Resident 1

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

				Chronic Nonca	rcinogenic Effec	ts		Lifetime Carci	nogenic Effects	
	RME	Absorption	Human		Adjusted	Hazard	Human		Adjusted	
Chemicals	Conc	Factor	Intake Factor	Daily	Dermal	Quotient	Intake Factor	Daily	Dermal	
of	(CS)	(ABS)	(HIF)	Intake	RfD	(HO)	(HJF)	Intake	Slope Factor	Risk
Potential Concern	mg/kg	unitless	kg/kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day)-1	unitless
Acetone*	0.164		33-7		- 3 - 3					
Benzene*	0 008									
2-Butanone*	0 044									
Ethylbenzene*	0.027									
o-Xylene*	0.016								•	
Bis(2-ethylhexyl)phthalate	0 266	1.00E-01	1 15E-05	3.07E-07	2.0E-02	2E-05	4 94E-06	1.31E-07	1.4E-02	2E-09
Carbazole	0.271	1.00E-01	1 15E-05	3 13E-07			4.94E-06	1.34E-07	2.0E-02	3E-09
Acenaphthene	0.118	1.30E-01	1 15E-05	1.77E-07	6.0E-02	3E-06	4.94E-06	7.58E-08		
Acenaphthylene	0.084	1.30E-01	1 15E-05	1.26E-07			4.94E-06	5.40E-08		
Anthracene	0.198	1.30E-01	1.15E-05	2.97E-07	3 0E-01	1E-06	4.94E-06	1.27E-07		
Benzo(a)anthracene	0.288	1.30E-01	1.15E-05	4 32E-07			4 94E-06	1.85E-07	7 3E-01	1E-07
Benzo(b)fluoranthene	0.258	1 30E-01	1.15E-05	3.87E-07			4.94E-06	1.66E-07	7.3E-01	1E-07
Benzo(k)fluoranthene	0.254	1 30E-01	1.15E-05	3.81E-07			4 94E-06	1 63E-07	7 3E-02	1E-08
Benzo(g,h,i)perylene	0.331	1 30E-01	1.15E-05	4.96E-07			4 94E-06	2.13E-07		
Benzo(a)pyrene	0.299	1 30E-01	1.15E-05	4.48E-07			4 94E-06	1 92E-07	7.3E+00	1E-06
Chrysene	0.513	1 30E-01	1.15E-05	7 69E-07			4.94E-06	3 30E-07	7.3E-03	2E-09
Dibenzo(a,h)anthracene	0.103	1 30E-01	1.15E-05	1 54E-07			4.94E-06	6.62E-08	7.3E+00	5E-07
Fluoranthene	0:734	1 30E-01	1.15E-05	1 10E-06	4.0E-02	3E-05	4.94E-06	4.72E-07	}	
Fluorene	0.194	1 30E-01	1 15E-05	2 91E-07	4.0E-02	7E-06	4.94E-06	1.25E-07		
Indeno(1,2,3-cd)pyrene	0 242	1 30E-01	1 15E-05	3 63E-07			4.94E-06	1 55E-07	7 3E-01	1E-07
Naphthalene	0 175	1.30E-01	1 15E-05	2.62E-07	2 0E-02	1E-05	4 94E-06	1 12E-07		
Phenanthrene	0 554	1 30E-01	1 15E-05	8 31E-07			4 94E-06	3 56E-07		
Pyrene	0 998	1.30E-01	1 15E-05	1.50E-06	3 0E-02	5E-05	4 94 E -06	6.41E-07		
Beryllium*	1.178									
Chromium*	19 389				1					
Copper*	32:712									
Mercury*	0.166									
Nickel*	34 373									
Thallium*	2.537									
			Total Pathway	Hazard Index	>	1E-04		Total Pathway	Risk>	2E-06

DERMAL CONTACT WITH SOIL

CS = Concentration of chemical in soil (mg/kg). See Table 9

ABS = Default value from Rags Part E (USEPA 2004c)

1 00E-06 CF = 0 000001 kg/mg - Conversion Factor

5.70E+03 SAa = 5,700 sq cm - Skin Surface Area available for an adult, (USEPA 2004c)

 $2.80\text{E}{+}03\,\text{ SAc} = 2,800\,\text{ sq cm}$ - Skin Surface Area available for an child, (USEPA 2004c)

2.40E+01 EDa = 24 yr - Exposure Duration for an adult, (USEPA 1991)

 $6.00\text{E+00}\;\text{EDc}=6\;\text{yr}$ - Exposure Duration for a child, (USEPA 1991)

 $3\ 50E+02\ EFa=350\ days/yr$ - Exposure Frequency for an adult, (USEPA 1991)

3 50E+02 EFc = 350 days/yr - Exposure Frequency for a child, (USEPA 1991) 7 00E+01 BWa = 70 kg - Body Weight for an adult, (USEPA 1991)

I SOE+01 BWc = 15 kg - Body Weight for a child, (USEPA 1991)

1 095E+04 ATn = 10,950 days - Averaging Time for noncarcinogenic compounds, (USEPA 1991)

2 555E+04 ATc = 25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

7 00E-02 AFa = 0 07 mg/cm2 - Soil to Skin Adherence Factor, (USEPA 2004e) 2 00E-01 AFc = 0 2 mg/cm2 - Soil to Skin Adherence Factor, (USEPA 2004e)

1 15E-05 HIF = ((SAa * EFa * EDa * AFa / BWa) + (SAc * EFc * EDc* AFc / BWc)) * CF / (ATn)

4.94E-06 HIF = ((SAa * EFa * Eda * AFa / BWa) + (SAc * EFc * Edc * AFc / BWc)) * CF / (ATc)

DAILY INTAKE = (CS * ABS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

NOTE

HIF-NONCARCINOGENIC---->

HIF-CARCINOGENIC----->

*BTEX compounds and inorganics excluded from dermal risk assessment (USEPA 2004c).

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Inhalation of Chemicals in Fugitive Dust Reasonable Maximum Exposure (RME)

Post-Remediation Resident 1

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Chroni	c Noncarcinoger	nic Effects			Lifetime Car	cinogenic Effects	
	RME	Human				Hazard	Human		Inhalation	
Chemicals	Conc	Intake Factor	Daily	Inhalation	Inhalation	Quotient	Intake Factor	Daily	SF (mg/kg-day) ⁻¹	Inhalation
of	(CS)	(HIF)	Intake	RfC	RfD	(HQ)	(HIF)	Intake	or	Risk
Potential Concern	mg/kg	kg/kg-day	mg/kg-day	mg/m³	mg/kg-day	unitless	kg/kg-day	mg/kg-day	UR (ug/m ³) ⁻¹	unitless
Acetone	0 164	2.23E-10	3.66E-11				9 56E-11	1.57E-11		
Benzene	0 008	2.23E-10	1.78E-12	3 0E-02	8 6E-03	2E-10	9.56E-11	7 65E-13	2.7E-02	2E-14
2-Butanone	0 044	2.23E-10	9.81E-12	5 0E+00	1 4E+00	7E-12	9.56E-11	4 21E-12		
Ethylbenzene	0 027	2.23E-10	6.02E-12	1 0E+00	2 9E-01	2E-11	9.56E-11	2 58E-12		
o-Xylene	0.016	2.23E-10	3.57E-12	1 0E-01	2 9E-02	1E-10	9.56E-11	1.53E-12		
Bis(2-ethylhexyl)phthalate	0 266	2.23E-10	5 93E-11				9 56E-11	2.54E-11		
Carbazole	0 271	2.23E-10	6 04E-11				9 56E-11	2.59E-11		
Acenaphthene	0 118	2 23E-10	2 63E-11				9 56E-11	1.13E-11		
Acenaphthylene	0.084	2 23E-10	1 87E-11				9 56E-11	8 03E-12		
Anthracene	0.198	2 23E-10	4 42E-11				9.56E-11	1 89E-11		
Benzo(a)anthracene (1, 2)	0.288	7 26E-10	2 09E-10			ļ	3.11E-10	8 97E-11	8.8E-05	8E-12
Benzo(b)fluoranthene (1,2)	0 258	7 26E-10	1 87E-10				3.11E-10	8.03E-11	8.8E-05	7E-12
Benzo(k)fluoranthene (1,2)	0 254	7 26E-10	1.85E-10				3.11E-10	7.91E-11	8 8E-06	7E-13
Benzo(g,h,i)perylene	0.331	2 23E-10	7.38E-11				9.56E-11	3.16E-11		
Benzo(a)pyrene (1, 2)	0.299	7 26E-10	2.17E-10				3 11E-10	9.31E-11	8 8E-04	8E-11
Chrysene (1, 2)	0.513	7.26E-10	3.73E-10				3 11E-10	1.60E-10	8 8E-07	1E-13
Dibenzo(a,h)anthracene (1, 2)	0.103	7.26E-10	7.48E-11				3 11E-10	3.21E-11	8 8E-04	3E-11
Fluoranthene	0.:734	2.23E-10	1.64E-10				9 56E-11	7.02E-11		
Fluorene	0.194	2.23E-10	4.33E-11				9 56E-11	1 85E-11		
Indeno(1,2,3-cd)pyrene (1, 2)	0.242	7.26E-10	1:76E-10				3.11E-10	7 53E-11	8.8E-05	7E-12
Naphthalene(1)	0.175	7.26E-10	1.27E-10	3.0E-03		4E-08	3.11E-10	5.45E-11		
Phenanthrene	0.554	2.23E-10	1 24E-10			į	9.56E-11	5_30E-11		
Pyrene	0.998	2.23E-10	2 23E-10				9.56E-11	9.54E-11		
Beryllium (1, 2)	1 178	7 26E-10	8 56E-10	2.0E-05		4E-05	3 11E-10	3.67E-10	2.4E-03	9E-10
Chromium (1, 2, 3)	19 389	7 26E-10	1.41E-08	1 0E-04		1E-04	3 11E-10	6.04E-09	1 2E-02	7E-08
Copper	32.712	2 23E-10	7 30E-09				9 56E-11	3 13E-09		
Mercury	0.166	2 23E-10	3.70E-11	3 0E-04	8 6E-05	4E-07	9 56E-11	1 59E-11		
Nickel	34 373	2 23E-10	7.67E-09				9 56E-11	3 29E-09		
Thallium	2.537	2.23E-10	5.66E-10				9.56E-11	2.43E-10	1	
			Total Pathway I	fazard Index	>	2E-04]	Total Pathway	Risk>	7E-08

INHALATION DUE TO FUGITIVE DUST

CS = Concentration of chemical in soil (mg/kg). See Table 9.

1 32E+09 PEF = 1,320,000,000 m^3/kg - Particulate Emission Factor, (IAC 2002)

1 52E+01 IRa = 20 m³/day - Inhalation Rate of an adult, (USEPA 1991)

1 00E+01 IRc = 10 m³/day - Inhalation Rate of a child, (USEPA 1997a)

 $3\ 50E + 02\ EFa = 350\ days/yr$ - Exposure Frequency for an adult, (USEPA 1991) 3 50E+02 EFc = 350 days/yr - Exposure Frequency for a child, (USEPA 1991)

2 40E+01 EDa = 24 yr - Exposure Duration for an adult, (USEPA 1991)

6.00E+00 EDc = 6 yr - Exposure Duration for a child, (USEPA 1991)

7.00E+01 BWa = 70 kg - Body Weight for an adult, (USEPA 1991)

1 50E+01 BWc = 15 kg - Body Weight for a child, (USEPA 1991)

1 095E+04 ATn = 10,950 days - Averaging Time for noncarcinogenic compounds, (USEPA 1991)

2 555E+04 ATc =25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

2 23E-10 HIF = (((IRa * EFa * EDa) / BWa) + ((IRc * EFc * EDc) / BWc)) / (PEF * ATn)

9 56E-11 HIF = (((Ra * EFa * EDa) / BWa) + ((Rc * EFc * EDc) / BWc)) / (PEF * AIc)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

FOR CARCINOGENIC PAHS NAPHTHALENE, BERYLLIUM AND CHROMIUM:

HIF-NONCARCINOGENIC-HIF-CARCINOGENIC-

HIF-NONCARCINOGENIC----HIF-CARCINOGENIC-

7 26E-10 HIF = ((EFa * EDa) + (EFc * EDc)) / (PEF * AIn)

3 11E-10 HIF = ((EFa * EDa) + (EFc * EDc)) / (PEF * AIc)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfC) RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

NOTES:

- (1) Units for HIF are kg/m 3 and units for Daily Intake are mg/m 3
- (2) Unit Risk (UR) (ug/m 3)1 is used to calculate carcinogenic risk
- (3) Chromium concentration is total chromium, RfC and UR are for chromium VI particulates

Inhalation of Chemicals in Vapor Phase

Reasonable Maximum Exposure (RME)

Post-Remediation Resident 1

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

1											
		Volati-		Non	carcinogenic Ef	fects			Lifetime Car	cinogenic Effects	
	RME	zation	Human		******			Human		Inhalation	
	Conc	Factor	Intake Factor	Daily	Inhalation	Inhalation	Hazard	Intake Factor	Daily	Slope Factor (SF)	Inhalation
Chemicals	(CS)	(VF)	(HIF)	Intake	RfC	RfD	Quotient	(HIF)	Intake	(mg/kg-day) ⁻¹	Risk
of	` ´	` ′	m³/kg-day OR	mg/kg-day OR			(HQ)	m³/kg-day OR	mg/kg-day OR		
Potential Concern	mg/kg	m³/kg	unitless *	mg/m³*	mg/m³	mg/kg-day	unitless	unitless *	mg/m³ *		unitless
Acetone	0.164	4.71E+04	2.94E-01	1 03E-06				1.26E-01	4.39E-07		
Benzene	0 008	8.38E+03	2.94E-01	2 81E-07	3.0E-02	8.6E-03	3E-05	1 26E-01	1.20E-07	2.7E-02	3E-09
2-Butanone	0 044	5.84E+04	2.94E-01	2 22E-07	5.0E+00	1.4E+00	2E-07	1 26E-01	9.51E-08		
Ethylbenzene	0 027	1 28E+04	2.94E-01	6.19E-07	1.0E+00	2.9E-01	2E-06	1 26E-01	2 65E-07		
o-Xylene	0 016	1 46E+04	2 94E-01	3 23E-07	1 0E-01	2 9E-02	1E-05	1.26E-01	1 38E-07		
Naphthalene*	0.175	1.17E+05	9.59E-01	1.43E-06	3.0E-03		5E-04	4.11E-01	6.14E-07		
Total Pathway Hazard Index>							5E-04		Total Pathway I	Risk>	3E-09

INHALATION OF CHEMICALS IN VAPOR PHASE

CS = Concentration of chemical in soil (mg/kg). See Table 9

VF = Volatization factor. See Table 14.

1 52E+01 IRa = 20 m^3 /day - Inhalation Rate of an adult, (USEPA 1991)

1.00E+01 IRc = 10 m^3 /day - Inhalation Rate of a child, (USEPA 1997a)

3 50E+02 EFa = 350 days/yr - Exposure Frequency for an adult, (USEPA 1991)

 $3\ 50E + 02\ EFc = 350\ days/yr$ - Exposure Frequency for a child, (USEPA 1991)

2 40E+01 EDa = 24 yr - Exposure Duration for an adult, (USEPA 1991) 6.00E+00 EDc = 6 yr - Exposure Duration for a child, (USEPA 1991)

7.00E+01 BWa = 70 kg - Body Weight for an adult, (USEPA 1991)

1 50E+01 BWc = 15 kg - Body Weight for a child, (USEPA 1991)

1 095E+04 ATn = 10,950 days - Averaging Time for noncarcinogenic compounds, (USEPA 1991)

2 555E+04 ATc =25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

2 94E-01 HIF = (((Ra * EFa * EDa) / BWa) + ((Rc * EFc * EDc) / BWc)) / (ATn)

1 26E-01 HIF = (((IRa * EFa * EDa) / BWa) + ((IRc * EFc * EDc) / BWc)) / (ATc)

DAILY INTAKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

* FOR NAPHIHALENE:

HIF--CARCINOGENIC----

HIF-NONCARCINOGENIC-----

HIF-CARCINOGENIC----

9 59E-01 HIF = ((EFa * EDa) + (EFc * EDc)) / (AIn)

4 11E-01 HIF = ((EFa * EDa) + (EFc * EDc)) / (ATc)

DAILY IN IAKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (INTAKE / RfC)

RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

I able 24 Incidental Ingestion of Soil Central Tendency (CI)

Post-Remediation Resident 1

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Potential Concern				Chronic Nonca	rcinogenic Effec	ts		Lifetime C	arcinogenic Effec	ets
of Potential Concern (CS) mg/kg (HIF) kg/kg-day Intake mg/kg-day RiD mg/kg-day (HIQ) unitless kg/kg-day (HIF) mg/kg-day Intake mg/kg-day Factor mg/kg-day Ri unit Acetone 0 164 1.95E-06 3 20E-07 9 0E-01 4E-07 2 51E-07 4 12E-08 Benzcene 0 008 1.95E-06 3 20E-07 9 0E-01 4E-07 2 51E-07 4 12E-08 Benzcene 0 008 1.95E-06 3 20E-07 9 0E-01 1E-07 2 51E-07 4 12E-08 2 0E-02 1 10E-01 1.95E-06 5 27E-08 6 0E-01 1E-07 2 51E-07 4 02E-09 5 5E-02 1 E 04 1 0E-01 5 20E-07 2 51E-07 4 02E-09 5 20E-02 1 0E-01 5 20E-07 2 0E-02 2 251E-07 4 02E-09 4 0E-02 4 0E-03 2 51E-07 4 0E-03 1 4E-02 9 E 0E-03 2 0E-02 2 0E-02 2 51E-07 4 0E-03 2 0E-02 1 E 06 2 51E-07 4 0E-03 2 0E-02 1 E 06 2 51E-07 4 0E-03 2 0E-02 1 E 06 2 51E-07 4 97E-08 2 0E-		CI	Human			Hazard	Human		Oral	
Potential Concern	Chemicals	Conc	Intake Factor	Daily	Oral	Quotient	Intake Factor	Daily	Slope	
Acetone 0 0 164 1 95E-06 3 20E-07 9 0E-01 4E-07 2 51E-07 4 12E-08 Berzene 0 008 1 95E-06 1 56E-08 4 0H-03 4E-06 2 51E-07 2 11E-09 5 5E-02 1 E Ethylberzene 0 044 1 95E-06 8 59E-08 6 0E-01 1 E-07 2 51E-07 1 11E-08 Ethylberzene 0 027 1 95E-06 5 27E-08 1 0E-01 5E-07 2 51E-07 6 78E-09 0-Xylene 0 016 1 95E-06 3 13E-08 2 0E-01 2E-07 2 51E-07 4 02E-09 0-Xylene 0 016 1 95E-06 5 20E-07 2 0E-02 3E-05 2 51E-07 6 68E-08 1 4E-02 9 E Carbazole 0 0271 1 95E-06 5 20E-07 2 0E-02 3E-05 2 51E-07 6 68E-08 2 0E-02 1 E Accnaphthylene 0 0.18 1 95E-06 1 64E-07 2 51E-07 2 251E-07 2 296E-08 2 0E-02 1 E Accnaphthylene 0 0.084 1 95E-06 1 64E-07 2 51E-07 2 251E-07 2 296E-08 2 0E-02 1 E Accnaphthylene 0 0.084 1 95E-06 5 04E-07 2 0E-02 4E-06 2 51E-07 2 21E-08 2 0E-02 1 E Accnaphthylene 0 0.288 1 95E-06 5 04E-07 2 51E-07 2 251E-07 2 21E-08 2 0E-02 1 E Accnaphthylene 0 0.288 1 95E-06 5 04E-07 2 51E-07 2 251E-07 2 251E-07 2 3E-08 2 0E-02 1 E Accnaphthylene 0 0.288 1 95E-06 5 04E-07 2 251E-07 2 251E-07 2 3E-08 2 0E-02	of	(CS)	(HIF)	Intake	RfD	(HQ)	(HIF)	Intake		Risk
Berizene 0 008 1 195E-06 1 56E-08 4 0E-03 4E-06 2.51E-07 2.01E-09 5.5E-02 1 E Ethylberizene 0 044 1.95E-06 8 59E-08 6 0E-01 1E-07 2.51E-07 1.11E-08	Potential Concern	mg/kg	kg/kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day) ⁻¹	unitless
2-Butanone 0.044 1.95E-06 8.59E-08 6.0E-01 1E-07 2.51E-07 1.11E-08 Ethylbenzene 0.027 1.95E-06 5.27E-08 1.0E-01 5E-07 2.51E-07 6.78E-09 0.016 1.95E-06 5.27E-08 1.0E-01 5E-07 2.51E-07 4.02E-09 0.016 1.0E-06 5.20E-07 2.0E-01 2.0E-07 2.51E-07 6.68E-08 1.4E-02 9.E 0.0E-02 0.271 1.95E-06 5.29E-07 2.0E-02 3.E-05 2.51E-07 6.68E-08 2.0E-02 1.E 0.0E-02 0.0E	Acetone	0 164	1.95E-06	3.20E-07	9 0E-01	4E-07	2.51E-07	4 12E-08		
Ethylberzene 0 027	Benzene	0 008	1.95E-06	1 56E-08	4 0E-03	4E-06	2.51E-07	2.01E-09	5 5E-02	1 E-10
O-Xylene	2-Butanone	0.044	1.95E-06	8 59E-08	6 0E-01	1E-07	2.51E-07	1.11E-08		
Bis(2-ethylhexyl)phthalate	Ethylbenzene	0.027	1.95E-06	5 27E-08	1 0E-01	5E-07	2.51E-07	6.78E-09		
Carbazole 0.271	o-Xylene	0.016	1.95E-06	3 13E-08	2 0E-01	2E-07	2.51E-07	4.02E-09		
Accenaphthene 0.118 1.95E-06 2.30E-07 6.0E-02 4E-06 2.51E-07 2.96E-08 Accenaphthylene 0.084 1.95E-06 1.64E-07 2.51E-07 2.51E-07 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-08 2.51E-07 4.97E-09 2.51E-07 6.97E-09 4.96E-07 2.51E-07 6.97E-09 4.96E-07 2.51E-07 6.97E-09 4.96E-07 2.51E-07 8.31E-08 2.51E-07 8.31E-08 2.51E-07 7.51E-08 7.3E-02 5.25TE-07 7.51E-08 7.3E-02 5.25TE-07 7.51E-08 7.3E-02 5.25TE-07 7.51E-08 7.3E-02 5.25TE-07 7.51E-08 7.3E-02 5.25TE-07 7.51E-08 7.3E-03 9.25TE-07 7.51E-08 7.3E-03 9.25TE-07 7.51E-08 7.3E-03 9.25TE-07 7.51E-08 7.3E-03 9.25TE-07 7.51E-08 7.3E-03 9.25TE-07 7.51E-08 7.3E-03 9.25TE-07 7.51E-08 7.3E-03 9.25TE-07 7.51E-08 7.3E-03 9.25TE-07 7.51E-08 7.3E-03 9.25TE-07 7.51E-08 7.3E-03 9.25TE-07 7.51E-08 7.3E-03 9.25TE-07 7.51E-08 7.3E-03 9.25TE-07 7.51E-08 7.3E-03 9.25TE-07 7.3E-03 9.	Bis(2-ethylhexyl)phthalate	0 266	1.95E-06	5 20E-07	2 0E-02	3E-05	2.51E-07	6.68E-08	1.4E-02	9 E-10
Acenaphthylene	Carbazole	0.271	1.95E-06	5 29E-07			2.51E-07	6.81E-08	2.0E-02	1 E-09
Anthracene 0.198 1 95E-06 3 87E-07 3 0E-01 1E-06 2 51E-07 4 97E-08 Penzo(a)nthracene 0.288 1 95E-06 5 63E-07 2 51E-07 7 23E-08 7 3E-01 5 E Renzo(b)fluoranthene 0.254 1 95E-06 4 96E-07 2 51E-07 6 38E-08 7 3E-01 5 E Renzo(b)fluoranthene 0.254 1 95E-06 6 4.76E-07 2 51E-07 6 38E-08 7 3E-01 5 E Renzo(b)fluoranthene 0.254 1 95E-06 6 4.76E-07 2 51E-07 6 38E-08 7 3E-02 5 E Renzo(a)pyrene 0.299 1 95E-06 6 6.47E-07 2 51E-07 7 51E-08 7 3E-00 5 E Renzo(a)pyrene 0.513 1 95E-06 1 00E-06 2 51E-07 7 51E-08 7 3E-03 9 E P 0.513 1 95E-06 1 00E-06 2 51E-07 1 29E-07 7 3E-03 9 E P 0.513 1 95E-06 1 43E-06 1 40E-02 4E-05 2 51E-07 1 29E-07 7 3E-03 9 E 1 0.00E-06 1 43E-06 1 43E-07 1 25E	Acenaphthene	0.118	1.95E-06	2 30E-07	6.0E-02	4E-06	2.51E-07	2.96E-08		
Benzo(a)anthracene	Acenaphthylene	0.084	1.95E-06	1 64E-07			2 51E-07	2 11E-08		
Benzo(b)fluoranthene	Anthracene	0.198	1.95E-06	3 87E-07	3.0E-01	1E-06	2 51E-07	4 97E-08		
Benzo(k)filtoranthene	Benzo(a)anthracene	0.288	1 95E-06	5.63E-07			2 51E-07	7 23E-08	7 3E-01	5 E-08
Benzo(g,h,i)perylene	Benzo(b)fluoranthene	0.258	1.95E-06	5.04E-07			2 51E-07	6 48E-08	7 3E-01	5 E-08
Benzo(a)pyrene 0 299 1 95E-06 5 84E-07 251E-07 7 51E-08 7 3E+00 5 E Chrysene 0 513 1 95E-06 1 00E-06 Dibenzo(a,h)anthracene 0 103 1 95E-06 2 01E-07 251E-07 1 29E-07 7 3E-03 9 E Fluoranthene 0 734 1 95E-06 1 43E-06 4 0E-02 4E-05 251E-07 1 .84E-07 2 E Fluorene 0 194 1 95E-06 3 .79E-07 4 0E-02 9E-06 2 51E-07 4 .87E-08 L 10deno(1,2,3-cd)pyrene 0 242 1.95E-06 4 73E-07 2 0E-02 2E-05 2 51E-07 4 .87E-08 Naphthalene 0 175 1 95E-06 3 42E-07 2 0E-02 2E-05 2 51E-07 4 39E-08 Pyrene 0 998 1.95E-06 1 08E-06 2 0E-03 1 E-03 2 51E-07 1 39E-07 2 51E-07 Beryllium 1 178 1 95E-06 2 30E-06 2 0E-03 1 E-03 2 51E-07 2 96E-07 2 96E-07 Chromium* 19 389 1.95E-06 3 79E-05 3 .0E-03 1 E-03 2 51E-07 2 96E-07 Chromium* 19 389 1.95E-06 6 39E-05 3 .0E-03 1 E-02 2 51E-07 4 .87E-06 Chromium* 0 166 1 95E-06 5 32E-07 4 0E-02 2 51E-07 4 .87E-06 Chromium* 0 166 1 95E-06 5 32E-07 4 0E-02 2 51E-07 4 .87E-06 Chromium* 0 166 1 95E-06 5 32E-07 4 0E-02 2 51E-07 4 .87E-06 Chromium* 0 166 1 95E-06 5 32E-07 4 0E-02 2 51E-07 4 .87E-06 Chromium* 0 166 1 95E-06 5 32E-07 4 0E-02 2 51E-07 4 .87E-06 Chromium* 0 166 1 95E-06 5 24E-07 2 51E-07 4 .87E-06 Chromium* 0 166 1 95E-06 5 32E-07 4 .87E-06 2 .51E-07 4 .87E-06 Chromium* 0 166 1 95E-06 5 32E-07 2 .51E-07 4 .87E-06 2 .51E-07 4 .87E-06 Chromium* 0 166 1 95E-06 5 32E-07 2 .51E-07 4 .87E-06 2	Benzo(k)fluoranthene	0.254	1 95E-06	4.96E-07			2.51E-07	6 38E-08	7 3E-02	5 E-09
Chrysene 0.513 1.95E-06 1.00E-06 2.01E-07 2.51E-07 1.29E-07 7.3E-03 9.E. Chrysene 0.103 1.95E-06 2.01E-07 2.51E-07 2.59E-08 7.3E+00 2.E. Chrysene 0.103 1.95E-06 1.43E-06 4.0E-02 4E-05 2.51E-07 1.84E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-07 2.51E-07 1.84E-08 2.51E-07 1.84E-08 2.51E-07 1.84E-08 2.51E-07 1.84E-08 2.51E-07 1.84E-08 2.51E-07 1.84E-08 2.51E-07 1.84E-08 2.51E-07 1.84E-08 2.51E-07 1.84E-08 2.51E-07 1.84E-08 2.51E-07 1.84E-08 2.51E-07 1.84E-08 2.51E-07 1.84E-08 2.51E-07 1.84E-08 2.51E-07	Benzo(g,h,i)perylene	0.331	1 95E-06	6.47E-07			2 51E-07	8.31E-08		
Dibenzo(a,h)anthracene 0.103 1.95E-06 2.01E-07 2.51E-07 2.59E-08 7.3E+00 2.EE-07 2.51E-07 2.59E-08 7.3E+00 2.EE-07 2.51E-07 2.59E-08 7.3E+00 2.EE-07 2.59E-08 7.3E+00 2.EE-07 2.59E-08 7.3E+00 2.EE-07 2.59E-08 7.3E+00 2.EE-07 2.59E-08 7.3E+00 2.EE-07 2.59E-08 7.3E+00 2.EE-07 2.59E-08 7.3E+00 2.EE-07 2.59E-08 2.59E-08 2.59E-08 2.59E-08 2.59E-08 2.59E-08 2.59E-08 2.59E-08 2.59E-08 2.59E-08 2.59E-09 2.59E-0	Benzo(a)pyrene	0.299	1 95E-06	5.84E-07			2 51E-07	7.51E-08	7.3E+00	5 E-07
Fluoranthene	Chrysene	0.513	1 95E-06	1.00E-06			2.51E-07	1.29E-07	7.3E-03	9.E-10
Fluorene 0.194 1.95E-06 3.79E-07 4.0E-02 9E-06 2.51E-07 4.87E-08 Indeno(1,2,3-cd)pyrene 0.242 1.95E-06 4.73E-07 2.0E-02 2.51E-07 6.08E-08 7.3E-01 4.E Naphthalene 0.175 1.95E-06 3.42E-07 2.0E-02 2.51E-07 4.39E-08 2.51E-07 1.39E-07 Pyrene 0.998 1.95E-06 1.95E-06 3.0E-02 6E-05 2.51E-07 2.51E-07 2.51E-07 1.39E-07 Pyrene 0.998 1.95E-06 2.30E-06 2.0E-03 1.E-03 2.51E-07 2.96E-07 1.50E-	Dibenzo(a,h)anthracene	0.103	1 95E-06	2.01E-07			2.51E-07	2.59E-08	7.3E+00	2.E-07
Indenc(1,2,3-cd)pyrene 0 242 1 95E-06 4 73E-07 2 0E-02 2E-05 2 51E-07 6 08E-08 7 3E-01 4 E Naphthalene 0 175 1 95E-06 3 42E-07 2 0E-02 2E-05 2 51E-07 4 39E-08 2 51E-07 4 39E-08 2 51E-07 1 39E-07 2 51E-07 1 39E-07 2 51E-07 1 39E-07 2 51E	Fluoranthene	0 734	1.95E-06	1.43E-06	4 0E-02	4E-05	2.51E-07	1.84E-07		
Name Name	Fluorene	0.194	1 95E-06	3.79E-07	4 0E-02	9E-06	2.51E-07	4.87E-08		
Phenanthrene 0 554 1.95E-06 1 08E-06 2 51E-07 1 39E-07 Pyrene 0 998 1.95E-06 1 95E-06 3 0E-02 6E-05 2 51E-07 2 51E-07 Beryllium 1 178 1 95E-06 2 30E-06 2 0E-03 1E-03 2 51E-07 2 96E-07 Chromium* 19 389 1 95E-06 3 79E-05 3 .0E-03 1E-02 2 51E-07 4 .87E-06 Copper 32 712 1 .95E-06 6 39E-05 4 0E-02 2E-03 2 51E-07 8 .22E-06 Mercury 0 166 1 95E-06 3 24E-07 251E-07 4 17E-08 Nickel 34 373 1.95E-06 6 71E-05 2 0E-02 3E-03 2 51E-07 8 .63E-06	Indeno(1,2,3-cd)pyrene	0 242	1.95E-06	4 73E-07			2 51E-07	6 08E-08	7 3E-01	4 E-08
Pyrene 0 998 1.95E-06 1 95E-06 3 0E-02 6E-05 2 51E-07 2 51E-07 Beryllium 1 178 1 95E-06 2 30E-06 2 0E-03 1E-03 2 51E-07 2 96E-07 Chromium* 19 389 1 95E-06 3 79E-05 3 .0E-03 1E-02 2 51E-07 4.87E-06 Copper 32 712 1.95E-06 6 39E-05 4 0E-02 2E-03 2 51E-07 8 22E-06 Mercury 0 166 1.95E-06 3 24E-07 2.51E-07 4.17E-08 Nickel 34 373 1.95E-06 6 71E-05 2.0E-02 3E-03 2.51E-07 8.63E-06	Naphthalene	0 175	1.95E-06	3 42E-07	2 0E-02	2E-05	2 51E-07	4 39E-08		
Beryllium	Phenanthrene	0 554	1.95E-06	1 08E-06			2 51E-07	1 39E-07		
Chromium* 19 389 1 95E-06 3 79E-05 3 0E-03 1E-02 2 51E-07 4.87E-06 Copper 32 712 1 95E-06 6 39E-05 4 0E-02 2E-03 2 51E-07 8 22E-06 Mercury 0 166 1 95E-06 3 24E-07 251E-07 4 17E-08 Nickel 34 373 1 95E-06 6 71E-05 2 0E-02 3E-03 2 51E-07 8 63E-06	Pyrene	0 998	1.95E-06	1 95E-06	3 0E-02	6E-05	2 51E-07	2 51E-07		
Copper 32 712 1.95E-06 6 39E-05 4.0E-02 2E-03 2.51E-07 8.22E-06 Mercury 0.166 1.95E-06 3.24E-07 2.51E-07 4.17E-08 Nickel 34.373 1.95E-06 6.71E-05 2.0E-02 3E-03 2.51E-07 8.63E-06	Beryllium	1 178	1.95E-06	2 30E-06	2.0E-03	1E-03	2 51E-07	2.96E-07		
Mercury 0 166 1 95E-06 3 24E-07 2.51E-07 4 17E-08 Nickel 34 373 1.95E-06 6 71E-05 2.0E-02 3E-03 2.51E-07 8.63E-06	Chromium*	19 389	1.95E-06	3 79E-05	3.0E-03	1E-02	2 51E-07	4.87E-06		
Nickel 34 373 1.95E-06 6 71E-05 2.0E-02 3E-03 2.51E-07 8.63E-06	Copper	32.712	1.95E-06	6 39E-05	4.0E-02	2E-03	2.51E-07	8.22E-06	-	
37373 135233	Mercury	0.166	1.95E-06	3 24E-07			2.51E-07	4.17E-08		
The Pirm 2 537 1 95E-06 4 96E-06 2 51E-07 6 37E-07	Nickel	34 373	1.95E-06	6.71E-05	2.0E-02	3E-03	2.51E-07	8.63E-06		
Thumbury 1997 The second secon	Thallium	2.537	1.95E-06	4.96E-06	L		2.51E-07	6.37E-07		9.E-07

INCIDENTAL INGESTION OF SOIL

CS = Concentration of chemical in soil (mg/kg) See Table 9

1 00E-06 CF = 0 000001 kg/mg - Conversion Factor

5.00E+01 IRa = 50 mg/day - Ingestion Rate of soil by an adult, (USEPA 1991)

1 00E+02 IRc = 100 mg/day - Ingestion Rate of soil by a child, (USEPA 1991)

7.00E+00 EDa = 7 yr - Exposure Duration for an adult, (USEPA 1991)

2 00E+00 EDc = 2 yr - Exposure Duration for an adult, (USEPA 1991)

3 50E+02 EFa = 350 days/yr - Exposure Frequency for an adult, (USEPA 1991)

3 50E+02 EFc = 350 days/yr - Exposure Frequency for a child, (USEPA 1991) 7 00E+01 BWa = 70 kg - Body Weight for an adult, (USEPA 1991)

1 50E+01 BWc = 15 kg - Body Weight for a child, (USEPA 1991)

3 285E+03 ATn = 3,285 days - Averaging Time for noncarcinogenic compounds, (USEPA 1991)

2.555E+04 AIc = 25,550 days - Averaging I'me for carcinogenic compounds, (USEPA 1991)

1 00E+00 FIa = 1 - Fraction Ingested, (USEPA 1989)

1.00E+00 FIc = 1 - Fraction Ingested, (USEPA 1989)

1 95E-06 HIF = ((IRa * EFa * EDa * Fla / BWa) + (IRc * EFc * EDc * Flc / BWc)) * CF / (ATn)

2 51E-07 HIF = ((IRa * EFa * EDa * Fla / BWa) + (IRc * EFc * EDc * Flc / BWc)) * CF / (ATc)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

^{*} Chromium concentration is total chromium, RfD is for chromium VI particulates

Dermal Contact with Soil

Central Tendency (CT)

Post-Remediation Resident 1

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

				Chronic Nonca	rcinogenic Effec	ts		Lifetime Carci	nogenic Effects	
	CI	Absorption	Human		Adjusted	Hazard	Human		Adjusted	
Chemicals	Conc	Factor	Intake Factor	Daily	Dermal	Quotient	Intake Factor	Daily	Dermal	
of	(CS)	(ABS)	(HIF)	Intake	RfD	(HQ)	(HIF)	Intake	Slope Factor	Risk
Potential Concern	mg/kg	unitless	kg/kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day) ⁻¹	unitless
Acetone*	0.164									
Benzene*	0.008									
2-Butanone*	0 044									
Ethylbenzene*	0 027									
-Xylene*	0.016									
Bis(2-ethylhexyl)phthalate	0.266	1 00E-01	2 20E-06	5.85E-08	2.0E-02	3E-06	2 83E-07	7 52E-09	1 4E-02	1E-10
Carbazole	0.271	1 00E-01	2.20E-06	5 96E-08			2 83E-07	7.66E-09	2.0E-02	2E-10
Acenaphthene	0.118	1 30E-01	2.20E-06	3 37E-08	6 0E-02	6E-07	2.83E-07	4.34E-09		
Acenaphthylene	0 084	1.30E-01	2 20E-06	2.40E-08			2.83E-07	3.09E-09		
Anthracene	0 198	1.30E-01	2 20E-06	5.66E-08	3.0E-01	2E-07	2 83E-07	7 28E-09		
Benzo(a)anthracene	0 288	1 30E-01	2 20E-06	8.23E-08			2 83E-07	1 06E-08	7.3E-01	8E-09
Benzo(b)fluoranthene	0.258	1 30E-01	2.20E-06	7 37E-08			2.83E-07	9.48E-09	7.3E-01	7E-09
Benzo(k)fluoranthene	0.254	1 30E-01	2.20E-06	7 26E-08			2.83E-07	9.33E-09	7 3E-02	7E-10
Benzo(g,h,i)perylene	0.331	1.30E-01	2.20E-06	9.46E-08			2 83E-07	1 22E-08		
Benzo(a)pyrene	0 299	1.30E-01	2 20E-06	8.55E-08			2 83E-07	1.10E-08	7.3E+00	8E-08
Chrysene	0 513	1.30E-01	2 20E-06	1.47E-07			2.83E-07	1.88E-08	7.3E-03	1E-10
Dibenzo(a,h)anthracene	0.103	1 30E-01	2.20E-06	2 94E-08			2.83E-07	3.78E-09	7 3E+00	3E-08
Fluoranthene	0.734	1 30E-01	2.20E-06	2 10E-07	4 0E-02	5E-06	2 83E-07	2 70E-08		
Fluorene	0.194	1 30E-01	2 20E-06	5.54E-08	4 0E-02	1E-06	2 83E-07	7.13E-09		
Indeno(1,2,3-cd)pyrene	0.242	1.30E-01	2 20E-06	6.92E-08			2.83E-07	8.89E-09	7.3E-01	6E-09
Naphthalene	0 175	1.30E-01	2 20E-06	5.00E-08	2.0E-02	3E-06	2.83E-07	6.43E-09		
Phenanthrene	0 554	1 30E-01	2.20E-06	1 58E-07			2.83E-07	2 04E-08	į	
Pyrene	0.998	1 30E-01	2.20E-06	2 85E-07	3 0E-02	1E-05	2 83E-07	3.67E-08	1	
Beryllium*	1.178				İ					
Chromium*	19.389	1						1		1
Copper*	32 712			1				1	1	
Mercury*	0.166				[ĺ		1	
Nickel*	34.373							1		
Thallium*	2.537							<u> </u>		
·			Total Pathway	Hazard Index	>	2E-05		Total Pathway	Risk>	1E-07

DERMAL CONTACT WITH SOIL

CS = Concentration of chemical in soil (mg/kg). See Table 9

ABS = Default value from Rags Part E (USEPA 2004c).

1.00E-06 CF = 0.000001 kg/mg - Conversion Factor

5 70E+03 $\,\mathrm{SAa} = 5{,}700\,\,\mathrm{sq}$ cm - Skin Surface Area available for an adult, (USEPA 2004c)

 $2.80\mathrm{E}{+}03~\mathrm{SAc}{=}2{,}800~\mathrm{sq}~\mathrm{cm}$ - Skin Surface Area available for an child, (USEPA 2004c)

7.00E+00 EDa = 7 yr - Exposure Duration for an adult, (USEPA 1991)

2.00E+00 EDc = 2 yr - Exposure Duration for a child, (USEPA 1991)

3 S0E+02 EFa = 350 days/yr - Exposure Frequency for an adult, (USEPA 1991)

3 50E+02 EFc = 350 days/yr - Exposure Frequency for a child, (USEPA 1991) 7 00E+01 BWa = 70 kg - Body Weight for an adult, (USEPA 1991)

1 50E+01 BWc = 15 kg - Body Weight for a child, (USEPA 1991)

3.285E+03 ATn = 3.285 days - Averaging Time for noncarcinogenic compounds, (USEPA 1991)

2 555E+04 ATc = 25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

1 00E-02 AFa = 0.01 mg/cm2 - Soil to Skin Adherence Factor, (USEPA 2004c) 4.00E-02 AFc = 0.04 mg/cm2 - Soil to Skin Adherence Factor, (USEPA 2004c)

2 20E-06 HIF = ((SAa * EFa * EDa * AFa / BWa) + (SAc * EFc * EDc* AFc / BWc)) * CF / (A In)

2 83E-07 HIF = ((SAa * EFa * Eda * AFa / BWa) + (SAc * EFc * Edc * AFc / BWc)) * CF / (ATc)

DAILY INTAKE = (CS * ABS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

HIF-NONCARCINOGENIC----

HIF-CARCINOGENIC---

* BTEX compounds and inorganics excluded from dermal risk assessment (USEPA 2004c).

Inhalation of Chemicals in Fugitive Dust

Central Tendency (CT)

Post-Remediation Resident 1

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Human Intake Factor (HIF) kg/kg-day 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10	Daily Intake mg/kg-day 4.41E-11 2.15E-12 1.18E-11 7.26E-12 4.30E-12 7.16E-11 3.17E-11 2.26E-11 5.33E-11 2.09E-10	Inhalation RfC mg/m³ 3 0E-02 5 0E+00 1 0E+00 1 0E-01	Inhalation RfD mg/kg-day 8 6E-03 1 4E+00 2 9E-01 2 9E-02	Hazard Quotient (HQ) unitless 3E-10 8E-12 3E-11 2E-10	Human Intake Factor (HIF) kg/kg-day 3 46E-11 3 46E-11 3 46E-11 3 46E-11 3 46E-11 3 46E-11	Daily Intake mg/kg-day 5 67E-12 2 77E-13 1 52E-12 9 34E-13 5 53E-13 9 20E-12 9 37E-12 4 08E-12	Inhalation SF (mg/kg-day) ⁻¹ or UR (ug/m ³) ⁻¹	Inhalation Risk unitless 8E-15
(HIF) kg/kg-day 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10	Intake mg/kg-day 4.41E-11 2.15E-12 1.18E-11 7.26E-12 4.30E-12 7.16E-11 7.29E-11 3.17E-11 2.26E-11 5.33E-11	RfC mg/m ³ 3 0E-02 5 0E+00 1 0E+00	RfD mg/kg-day 8 6E-03 1 4E+00 2 9E-01	(HQ) unitless 3E-10 8E-12 3E-11	(HIF) kg/kg-day 3 46E-11 3 46E-11 3 46E-11 3 46E-11 3 46E-11 3 46E-11 3 46E-11	Intake mg/kg-day 5 67E-12 2 77E-13 1 52E-12 9 34E-13 5 53E-13 9 20E-12 9 37E-12 4 .08E-12	or UR (ug/m³) ⁻¹	Risk unitless
kg/kg-day 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10	mg/kg-day 4.41E-11 2.15E-12 1.18E-11 7.26E-12 4.30E-12 7.16E-11 7.29E-11 3.17E-11 2.26E-11 5.33E-11	mg/m³ 3 0E-02 5.0E+00 1.0E+00	mg/kg-day 8 6E-03 1 4E+00 2.9E-01	unitless 3E-10 8E-12 3E-11	kg/kg-day 3 46E-11 3 46E-11 3 46E-11 3 46E-11 3 46E-11 3 46E-11 3 46E-11 3 46E-11	mg/kg-day 5 67E-12 2 77E-13 1 52E-12 9 34E-13 5 53E-13 9 20E-12 9 37E-12 4 08E-12	UR (ug/m³) ⁻¹	unitless
2.69E-10 2.69E-10 2.69E-10 2.69E-10 2.69E-10 2.69E-10 2.69E-10 2.69E-10 2.69E-10 2.69E-10	4 41E-11 2 15E-12 1 18E-11 7 26E-12 4 30E-12 7.16E-11 7 29E-11 3 17E-11 2 26E-11 5 33E-11	3 0E-02 5.0E+00 1.0E+00	8 6E-03 1 4E+00 2.9E-01	3E-10 8E-12 3E-11	3 46E-11 3 46E-11 3 46E-11 3 46E-11 3 46E-11 3 46E-11 3 46E-11 3 46E-11	5 67E-12 2 77E-13 1 52E-12 9 34E-13 5 53E-13 9 20E-12 9 37E-12 4.08E-12		
2.69E-10 2.69E-10 2.69E-10 2.69E-10 2.69E-10 2.69E-10 2.69E-10 2.69E-10 2.69E-10	2 15E-12 1 18E-11 7 26E-12 4 30E-12 7.16E-11 7 29E-11 3 17E-11 2 26E-11 5 33E-11	5.0E+00 1.0E+00	1 4E+00 2.9E-01	8E-12 3E-11	3.46E-11 3.46E-11 3.46E-11 3.46E-11 3.46E-11 3.46E-11 3.46E-11	2 77E-13 1 52E-12 9 34E-13 5 53E-13 9 20E-12 9 37E-12 4 08E-12	2.7E-02	8E-15
2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10	1 18E-11 7 26E-12 4 30E-12 7.16E-11 7 29E-11 3 17E-11 2 26E-11 5 33E-11	5.0E+00 1.0E+00	1 4E+00 2.9E-01	8E-12 3E-11	3 46E-11 3 46E-11 3.46E-11 3.46E-11 3.46E-11 3 46E-11	1 52E-12 9 34E-13 5 53E-13 9 20E-12 9 37E-12 4 08E-12	2.7E-02	8E-15
2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10	7 26E-12 4 30E-12 7.16E-11 7 29E-11 3 17E-11 2 26E-11 5 33E-11	1.0E+00	2.9E-01	3E-11	3 46E-11 3.46E-11 3.46E-11 3.46E-11 3 46E-11	9.34E-13 5.53E-13 9.20E-12 9.37E-12 4.08E-12		
2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10 2 69E-10	4 30E-12 7.16E-11 7 29E-11 3 17E-11 2 26E-11 5 33E-11				3.46E-11 3.46E-11 3.46E-11 3.46E-11	5.53E-13 9 20E-12 9 37E-12 4.08E-12		
2.69E-10 2.69E-10 2.69E-10 2.69E-10 2.69E-10	7.16E-11 7.29E-11 3.17E-11 2.26E-11 5.33E-11	1.0 E -01	2.9E-02	2E-10	3.46E-11 3.46E-11 3.46E-11	9 20E-12 9 37E-12 4 08E-12		
2.69E-10 2.69E-10 2.69E-10 2.69E-10	7.29E-11 3 17E-11 2 26E-11 5 33E-11				3.46E-11 3.46E-11	9 37E-12 4.08E-12		
2.69E-10 2.69E-10 2.69E-10	3 17E-11 2 26E-11 5 33E-11		• •		3 46E-11	4.08E-12		
2.69E-10 2.69E-10	2 26E-11 5 33E-11						1 1	
2 69E-10	5 33E-11				2.4672.11		1	
			·		3 46E-11	2.91E-12		
7 26E-10	2.00E-10				3.46E-11	6.85E-12		
	2.071-10				9.34E-11	2 69E-11	8.8E-05	2E-12
7 26E-10	1.87E-10	ŀ	1		9.34E-11	2.41E-11	8.8E-05	2E-12
7.26E-10	1 85E-10				9 34E-11	2.37E-11	8 8E-06	2E-13
2.69E-10	8 91E-11				3.46E-11	1.15E-11		
7.26E-10	2.17E-10				9.34E-11	2 79E-11	8.8E-04	2E-11
7 26E-10	3.73E-10				9.34E-11	4 79E-11	8.8E-07	4E-14
7 26E-10	7.48E-11				9 34E-11	9.62E-12	8 8E-04	8E-12
2 69E-10	1.97E-10	ļ			3 46E-11	2.54E-11		
2.69E-10	5.22E-11				3.46E-11	6 71E-12		
7.26E-10	1 76E-10			ł	9.34E-11	2 26E-11	8.8E-05	2E-12
7.26E-10	1 27E-10	3.0E-03		4E-08	9.34E-11	1.63E-11		
2 69E-10	1.49E-10				3 46E-11	1.92E-11		
2 69E-10	2.69E-10				3.46E-11	3.45E-11		
7 26E-10	8.56E-10	2 0E-05		4E-05	9.34E-11	1 10E-10	2.4E-03	3E-10
7.26E-10	1 41E-08	1.0E-04		1E-04	9.34E-11	1 81E-09	1.2E-02	2E-08
2.69E-10	8 80E-09				3 46E-11	1		
	4 47E-11	3.0E-04	8 6E-05	5E-07	3 46E-11	ı		
2.69E-10	9.25E-09				3.46E-11	E .		
2.69E-10 2.69E-10	6.83E.10				3.46E-11		<u> </u>	2E-08
	7 26E-10 2.69E-10 2.69E-10 2.69E-10	7 26E-10 1 41E-08 2.69E-10 8 80E-09 2.69E-10 4 47E-11 2.69E-10 9 25E-09 2.69E-10 6.83E-10	7 26E-10 1 41E-08 1 0E-04 2.69E-10 8 80E-09 2.69E-10 4 47E-11 3.0E-04 2.69E-10 9 25E-09 2.69E-10 6.83E-10	7 26E-10 1 41E-08 1 0E-04 2.69E-10 8 80E-09 2.69E-10 4 47E-11 3.0E-04 8 6E-05 2.69E-10 9 25E-09 2.69E-10 6.83E-10	7 26E-10 1 41E-08 1 0E-04 1E-04 2 69E-10 8 80E-09 2 69E-10 4 47E-11 3 0E-04 8 6E-05 5E-07 2 69E-10 9 25E-09 2 69E-10 6 83E-10	7 26E-10 1 41E-08 1.0E-04 1E-04 9 34E-11 269E-10 8 80E-09 3 46E-11 269E-10 4 47E-11 3.0E-04 8 6E-05 5E-07 3 46E-11 269E-10 9 25E-09 3 46E-11 2.69E-10 6.83E-10 3.46E-11	7 26E-10	7 26E-10 1 41E-08 1 .0E-04 1 E-04 9 .34E-11 1 81E-09 1 2E-02 2 .69E-10 4 .47E-11 3.0E-04 8 .6E-05 5E-07 3 .46E-11 1.19E-09 2 .69E-10 9 .25E-09 3 .46E-11 1.19E-09

INHALATION DUE TO FUGITIVE DUST

CS = Concentration of chemical in soil (mg/kg) See Table 9

1 32E+09 PHF = 1,320,000,000 m³/kg - Particulate Emission Factor, (IAC 2002)

2.00E+01 IRa = 20 m^3 /day - Inhalation Rate of an adult, (USEPA 1991)

 $1.00E+01~\mathrm{Rc}=10~\mathrm{m}^3/\mathrm{day}$ - Inhalation Rate of a child, (USEPA 1997a)

3 50E+02 EFa = 350 days/yr - Exposure Frequency for an adult, (USEPA 1991)

3 50E+02 EFc = 350 days/yr - Exposure Frequency for a child. (USEPA 1991)

7.00E+00 EDa = 7 yr - Exposure Duration for an adult, (USEPA 1991)

2 00E+00 EDc = 2 yr - Exposure Duration for a child, (USEPA 1991) 7 00E+01 BWa = 70 kg - Body Weight for an adult, (USEPA 1991)

1 50E+01 BWc = 15 kg - Body Weight for a child, (USEPA 1991)

3 285E+03 ATn = 3,285 days - Averaging Time for noncarcinogenic compounds, (USEPA 1991)

2 555E+04 ATc =25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

2.69E-10~HH=(((IRa*EFa*EDa)/BWa)+((IRc*EFc*HDc)/BWc))/(PEF*ATn)

3.46E-11 HJF = ((([Ra * EFa * EDa) / BWa) + (([Rc * EFc * EDc) / BWc)) / (PEF * ATc)

DAILY INTAKE = (CS * HJF)

HQ (noncarcinogenic) = (INTAKE / RfD) RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

FOR CARCINOGENIC PAHS NAPHTHALENE, BERYLLIUM AND CHROMIUM:

HIF-NONCARCINOGENIC--HIF--CARCINOGENIC-

HIF-NONCARCINOGENIC---

HIE-CARCINGGENIC-

7 26E-10 HIF = ((EFa * EDa) + (EFc * EDc)) / (PEF * ATn)

9 34E-11 HIF = ((EFa * EDa) + (EFc * EDc)) / (PEF * ATc)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfC) RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

NOTES:

- (1) Units for HIF are kg/m 3 and units for Daily Intake are mg/m 3
- (2) Unit Risk (UR) (ug/m 3)1 is used to calculate carcinogenic risk
- (3) Chromium concentration is total chromium, RfC and UR are for chromium VI particulates.

I able 27

Inhalation of Chemicals in Vapor Phase

Central Tendency (CI)

Post-Remediation Resident 1

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Volati-		Non	carcinogenic Ef	fects			Lifetime Car	cinogenic Effects	
	CT CT	zation	Human					Human		Inhalation	
	Conc	Factor	Intake Factor	Daily	Inhalation	Inhalation	Hazard	Intake Factor	Daily	Slope Factor (SF)	Inhalation
Chemicals	(CS)	(VF)	(HIF)	Intake	RfC	RfD	Quotient	(HIF)	Intake	(mg/kg-day),1	Risk
of			m ³ /kg-day OR				(HQ)	m ³ /kg-day OR	mg/kg-day OR		
Potential Concern	mg/kg	m³/kg	unitless *	mg/m³ *	mg/m³	mg/kg-day	unitless	unitless *	mg/m³ *		unitless
Acetone	0 164	2 56E+04	3 55E-01	2.28E-06				4.57E-02	2 93E-07		
Benzene	0.008	4 55E+03	3 55E-01	6.24E-07	3.0E-02	8.6E-03	7E-05	4.57E-02	8.03E-08	2.7E-02	2E-09
2-Butanone	0.044	3.17E+04	3 55E-01	4.93E-07	5.0E+00	14E+00	3E-07	4 57E-02	6.34E-08		
Ethylbenzene	0.027	6.97E+03	3 55E-01	1.38E-06	1.0E+00	2.9E-01	5E-06	4 57E-02	1.77E-07		
o-Xylene	0 016	7.92E+03	3 55E-01	7.18E-07	1.0E-01	2.9E-02	3E-05	4 57E-02	9.23E-08		
Naphthalene*	0.175	6.36E+04	9.59E-01	2.64E-06	3.0E-03		9E-04	1.23E-01	3.39E-07		
				Total Pathway I	Iazard Index	>	1E-03		Total Pathway F	Risk>	2E-09

INHALATION OF CHEMICALS IN VAPOR PHASE

CS = Concentration of chemical in soil (mg/kg) See Table 9

VF = Volatization factor See Table 14

2 00E+01 IRa = 20 m³/day - Inhalation Rate of an adult, (USEPA 1991)

1 00E+01 Rc = 10 m³/day - Inhalation Rate of a child, (USEPA 1997a)

3 50E+02 EFa = 350 days/yr - Exposure Frequency for an adult, (USEPA 1991)

3 50H+02 EFc = 350 days/yr - Exposure Frequency for a child, (USEPA 1991)

7 00E+00 EDa = 7 yr - Exposure Duration for an adult, (USEPA 1991)

 $2.00\text{E}+00\ \text{EDc}=2\ \text{yr}$ - Exposure Duration for a child, (USEPA 1991)

7.00E+01 BWa = 70 kg - Body Weight for an adult, (USEPA 1991) 1 50E+01 BWc = 15 kg - Body Weight for a child, (USEPA 1991)

3 285E+03 ATn = 3,285 days - Averaging Time for noncarcinogenic compounds, (USEPA 1991)

2 555E+04 AIc =25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

3 55E-01 HIF = (((IRa * EFa * EDa) / BWa) + ((IRc * EFc * EDc) / BWc)) / (AIn)

4 57E-02 HIF = (((IRa * EFa * EDa) / BWa) + ((IRc * EFc * EDc) / BWc)) / (AIc)

DAILY INTAKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (INTAKE / RfD) RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

9 59E-01 HIF = ((EFa * EDa) + (EFc * EDc)) / (ATn) 1 23E-01 HIF = ((EFa * EDa) + (EFc * EDc)) / (ATc)

DAILY INTAKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (INTAKE / RfC)

RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

HIF-NONCARCINOGENIC---HIE-CARCINOGENIC---

* FOR NAPHTHALENE: HIF-NONCARCINOGENIC---HIF-CARCINOGENIC-

Incidental Ingestion of Soil

Reasonable Maximum Exposure (RME)

Post-Remediation Resident 2

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Chronic Nonca	rcinogenic Effec	ts		Lifetime C	arcinogenic Effec	ts
	RME	Human			Hazard	Human		Oral	
Chemicals	Conc	Intake Factor	Daily	Oral	Quotient	Intake Factor	Daily	Slope	
of	(CS)	(HIF)	Intake	RfD	(HQ)	(HIF)	Intake	Factor	Risk
Potential Concern	mg/kg	kg/kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day)	unitless
Acetone	0113	3.65E-06	4 13E-07	9 0E-01	5E-07	1 57E-06	1 77E-07		
Benzene	0.009	3 65E-06	3 29E-08	4.0E-03	8E-06	1 57E-06	1.41E-08	5 5E-02	8E-10
2-Butanone	0.029	3 65E-06	1 06E-07	6.0E-01	2E-07	1.57E-06	4 54E-08		
o-Xylene	0.009	3 65E-06	3.29E-08	2 0E-01	2E-07	1.57E-06	1 41E-08		
Acenaphthene	0.074	3.65E-06	2.70E-07	6 0E-02	5E-06	1.57E-06	1 16E-07		
Acenaphthylene	0.052	3.65E-06	1.90E-07			1 57E-06	8.14E-08		
Anthracene	0115	3.65E-06	4 20E-07	3 0E-01	1E-06	1 57E-06	1.80E-07		
Benzo(a)anthracene	0 299	3 65E-06	1.09E-06			1 57E-06	4.68E-07	7.3E-01	3E-07
Benzo(b)fluoranthene	0 268	3 65E-06	9.79E-07			1.57E-06	4 20E-07	7.3E-01	3E-07
Benzo(k)fluoranthene	0 263	3 65E-06	9.61E-07			1 57E-06	4 12E-07	7 3E-02	3E-08
Benzo(g,h,i)perylene	0.344	3.65E-06	1.26E-06			1 57E-06	5.39E-07		
Benzo(a)pyrene	0.312	3.65E-06	1 14E-06			1 57E-06	4.88E-07	7.3E+00	4E-06
Chrysene	0 532	3.65E-06	1 94E-06			1.57E-06	8.33E-07	7.3E-03	6E-09
Dibenzo(a,h)anthracene	0 063	3.65E-06	2 30E-07			1.57E-06	9 86E-08	7 3E+00	7E-07
Fluoranthene	0 763	3 65E-06	2.79E-06	4 0E-02	7E-05	1.57E-06	1 19E-06		
Fluorene	0111	3 65E-06	4.05E-07	4 0E-02	1E-05	1 57E-06	1.74E-07		
Indeno(1,2,3-cd)pyrene	0.251	3.65E-06	9.17E-07			1 57E-06	3.93E-07	7.3E-01	3E-07
Naphthalene	0.613	3.65E-06	2 24E-06	2 0E-02	1E-04	1 57E-06	9.60E-07		
Phenanthrene	0.58	3.65E-06	2 12E-06	1		1.57E-06	9 08E-07		
Pyrene	1 08	3 65E-06	3.95E-06	3.0E-02	1E-04	1.57E-06	1 69E-06		
Beryllium	1 144	3 65E-06	4.18E-06	2 OE-03	2E-03	1 57E-06	1.79E-06		
Chromium*	19.192	3.65E-06	7.01E-05	3 OE-03	2E-02	1.57E-06	3.00E-05		
Соррег	32.983	3.65E-06	1 20E-04	4 0E-02	3E-03	1.57E-06	5.16E-05		
Метсигу	0.099	3.65E-06	3 62E-07			1.57E-06	1 55E-07		
Nickel	32.284	3.65E-06	1 18E-04	2.0E-02	6E-03	1.57E-06	5 05E-05		
I hallium	2.222	3.65E-06	8.12E-06	L		1.57E-06	3.48E-06		
		Total Pathway	Hazard Index	>	3E-02]	Total Pathway	Risk>	5E-06

INCIDENTAL INGESTION OF SOIL

CS = Concentration of chemical in soil (mg/kg). See Table 10.

1 00E-06 CF = 0 000001 kg/mg - Conversion Factor

1 00E+02 $\,$ IRa = 100 mg/day - Ingestion Rate of soil by an adult (USEPA 1991)

2 00E+02 $\,$ IRc = 200 mg/day - Ingestion Rate of soil by a child (USEPA 1991)

2 40E+01 EDa = 24 yr - Exposure Duration for an adult. (USEPA 1991)

6 00E+00 EDc = 6 yr - Exposure Duration for an adult (USEPA 1991)

3 50E+02 $\,$ EFa = 350 days/yr - Exposure Frequency for an adult (USEPA 1991)

3 50E+02 EFc = 350 days/yr - Exposure Frequency for a child (USEPA 1991)

7 00E+01 BWa = 70 kg - Body Weight for an adult (USEPA 1991) 1 50E+01 BWc = 15 kg - Body Weight for a child (USEPA 1991)

1 095E+04 AIn = 10 950 days - Averaging Time for noncarcinogenic compounds. (USEPA 1991)

2 555E+04 ATc = 25.550 days - Averaging Time for carcinogenic compounds. (USEPA 1991)

1 00E+00 FIa = 1 - Fraction Ingested (USEPA 1989)

1 00E+00 Flc = 1 - Fraction Ingested (USEPA 1989)

3 65E-06 HIF = ((IRa * EFa * EDa * FIa / BWa) + (IRc * EFc * EDc * FIc / BWc)) * CF / (AIn)

1 57E-06 HIF = ((IRa * EFa * EDa * Fla / BWa) + (IRc * EFc * EDc * Flc / BWc)) * CF / (ATc)

DAILY INTAKE = (CS * HIF)

HIF-NONCARCINOGENIC----->

HIF--CARCINOGENIC----->

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

^{*} Chromium concentration is total chromium. RfD is for chromium VI particulates.

Dermal Contact with Soil

Reasonable Maximum Exposure (RME)

Post-Remediation Resident 2

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Chemicals	Absorption Factor (ABS) unitless	Human Intake Factor (HIF) kg/kg-day	Daily Intake	Adjusted Dermal	Hazard	Human		c Effects Lifetime Carcinogenic Effects sted Hazard Human Adjusted			
of (CS) Potential Concern mg/kg Acetone* 0113 Benzene* 0009 2-Butanone* 0029 3-Xylene* 0009 Acenaphthene 0052 Acenaphthene 0152 Acenaphthylene 0152 Benzo(a)anthracene 0299 Benzo(b)fluoranthene 0263 Benzo(b)fluoranthene 0312 Chrysene 0312 Chrysene 0532 Dibenzo(a h)anthracene 0063 Fluoranthene 0763 Fluorene 0111 Indeno(1,2,3-cd)pyrene 0251 Naphthalene 058 Pyrene 108 Beryllium* 1919	(ABS)	(HIF)	,	Dermal				1 sajastea			
Potential Concern mg/kg		` ′	Intoles		Quotient	Intake Factor	Daily	Dermal			
Potential Concern mg/kg		leaden dou	make	RfD	(HQ)	(HIF)	Intake	Slope Factor	Risk		
Acetone* 0113 Benzene* 0009 2-Butanone* 0029 o-Xylene* 0009 Acenaphthene 0052 Anthracene 0115 Benzo(a)anthracene 0269 Benzo(b)fluoranthene 0263 Benzo(a)pyrene 0312 Chrysene 0532 Dibenzo(a h)anthracene 063 Fluoranthene 0763 Fluoranthene 058 Fluoranthene 058 Fluoranthene 058 Fluoranthene 063 Fluoranthene 058 Fluoranthene 058 Fluoranthene 063 Fluoranthene 058 Fluoranthene 058 Fluoranthene 058 Fluoranthene 058 Reyrene 0532 Dibenzo(a h)anthracene 0111 Indeno(1,2,3-cd)pyrene 0532 Dibenzo(a h)anthracene 0111 Indeno(1,2,3-cd)pyrene 0531 Dibenanthene 058 Pyrene 108 Beryllium* 1144 Chromium* 19192		Kg/Kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day)	unitless		
2-Butanone* 0029 2-Saylene* 0009 Acenaphthene 0074 Acenaphthylene 0052 Anthracene 0.115 Benzo(a)anthracene 0268 Benzo(b)fluoranthene 0263 Benzo(a,h)prene 0312 Chrysene 0532 Dibenzo(a,h)anthracene 063 Fluoranthene 0763 Fluoranthene 0763 Fluoranthene 0613 Fluoranthene 058 Pyrene 108 Beryllium* 19192							2202	, ,			
D-Xylene* 0099 Acenaphthene 0074 Acenaphthylene 0052 Anthracene 0.115 Benzo(a)anthracene 0268 Benzo(b)fluoranthene 0263 Benzo(b)fluoranthene 0263 Benzo(b)fluoranthene 0314 Benzo(a)pyrene 0312 Chrysene 0532 Dibenzo(a h)anthracene 063 Fluoranthene 0.763 Fluoranthene 0.111 Indeno(1,2,3-ed)pyrene 0.251 Naphthalene 0.613 Phenanthrene 0.58 Pyrene 108 Beryllium* 1919											
Acenaphthene 0074 Acenaphthylene 0052 Anthracene 0115 Benzo(a)anthracene 0268 Benzo(b)fluoranthene 0263 Benzo(b)fluoranthene 0344 Benzo(a)pyrene 0312 Chrysene 0532 Dibenzo(a h)anthracene 0763 Fluoranthene 0763 Fluoranthene 04613 Phorene 058 Pyrene 108 Beryllium* 19192											
Acenaphthylene 0.052 Anthracene 0.115 Benzo(a)anthracene 0.299 Benzo(b)fluoranthene 0.268 Benzo(k)fluoranthene 0.263 Benzo(k)fluoranthene 0.344 Benzo(a)pyrene 0.312 Chrysene 0.532 Dibenzo(a h)anthracene 0.633 Fluoranthene 0.763 Fluoranthene 0.251 Indeno(1,2,3-ed)pyrene 0.251 Vaphthalene 0.613 Phenanthrene 0.58 Pyrene 1.08 Beryllium* 1.144 Chromium* 19 192											
Anthracene Anthracene Benzo(a)anthracene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(a)fluoranthene Benzo(a)pyrene 0 312 Chrysene 0 532 Olibenzo(a h)anthracene Fluoranthene Fluoranthene 10 613 Fluorene 0 613 Phenanthrene 0 58 Pyrene 1 08 Beryllium* 1 144 Chromium* 1 9 192	1 30E-01	1.15E-05	1.11E-07	6.0E-02	2E-06	4 94E-06	4.75E-08				
Senzo(a)anthracene 0 299 Senzo(b)fluoranthene 0 268 Senzo(b)fluoranthene 0 263 Senzo(g,h i)perylene 0 344 Senzo(a)pyrene 0 312 Chrysene 0 532 Oibenzo(a h)anthracene 0 763 Fluoranthene 0 763 Fluoranthene 0 251 Indeno(1,2,3-cd)pyrene 0 251 Naphthalene 0 58 Pyrene 1 08 Beryllium* 1 144 Chromium* 19 192	1 30E-01	1.15E-05	7.80E-08			4 94E-06	3.34E-08	İ			
Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(g,h i)perylene Benzo(a)pyrene 0 312 Chrysene 0 532 Dibenzo(a h)anthracene Fluoranthene 10 763 Fluorene 0 0613 Phenanthrene 0 58 Pyrene 1 08 Beryllium* 1 144 Chromium* 0 263	1 30E-01	1.15E-05	1.72E-07	3 0E-01	6E-07	4 94E-06	7 39E-08				
Benzo(k)fluoranthene 0 263 Benzo(g,h i)perylene 0 344 Benzo(a)pyrene 0 312 Chrysene 0 532 Dibenzo(a h)anthracene 0 063 Fluoranthene 0 763 Fluorene 0 0.111 Indeno(1,2,3-ed)pyrene 0 051 Phenanthrene 0 58 Pyrene 1 08 Beryllium* 1 144 Chromium* 1 9 192	1.30E-01	1.15E-05	4.48E-07			4.94E-06	1 92E-07	7 3E-01	1E-07		
Benzo(g,h i)perylene 0 344 Benzo(a)pyrene 0 312 Chrysene 0 532 Dibenzo(a h)anthracene 0 063 Fluoranthene 0 763 Fluorene 0 111 Indeno(1,2,3-cd)pyrene 0 251 Naphthalene 0 613 Phenanthrene 0 58 Pyrene 1 08 Beryllium* 1 144 Chromium* 19 192	1.30E-01	1.15E-05	4 02E-07			4.94E-06	1 72E-07	7 3E-01	1E-07		
Benzo(a)pyrene 0 312 Chrysene 0 532 Dibenzo(a)anhartacene 0 063 Fluoranthene 0 763 Fluorene 0 111 Indeno(1,2,3-cd)pyrene 0 251 Naphthalene 0 613 Phenanthrene 0 58 Pyrene 1 08 Beryllium* 1 144 Chromium* 19 192	1.30E-01	1 15E-05	3 94E-07			4.94E-06	1.69E-07	7 3E-02	1E-08		
Chrysene 0 532 Dibenzo(a h)anthracene 0 063 Fluoranthene 0 763 Fluorene 0.111 Indeno(1,2,3-cd)pyrene 0 251 Naphthalene 0 613 Phenanthrene 0 58 Pyrene 1 08 Beryllium* 1 144 Chromium* 19 192	1 30E-01	1 15E-05	5 16E-07			4 94E-06	2.21E-07				
Dibenzo(a h)anthracene	1 30E-01	1 15E-05	4.68E-07			4 94E-06	2.00E-07	7.3E+00	1E-06		
Fluoranthene 0.763	1 30E-01	1 15E-05	7 98E-07			4 94E-06	3.42E-07	7.3E-03	2E-09		
Characteristics	1 30E-01	1 15E-05	9.45E-08			4.94E-06	4 05E-08	7.3E+00	3E-07		
Indeno(1,2,3-ed)pyrene 0 251 Naphthalene 0 613 Phenanthrene 0 58 Pyrene 1 08 Beryllium* 1 144 Chromium* 19 192	1 30E-01	1.15E-05	1.14E-06	4.0E-02	3E-05	4 94E-06	4 90E-07				
Naphthalene 0.613 Phenanthrene 0.58 Pyrene 1.08 Beryllium* 1.144 Chromium* 19.192	1 30E-01	1.15E-05	1.66E-07	4 0E-02	4E-06	4.94E-06	7.13E-08				
Phenanthrene 0.58 Pyrene 1.08 Beryllium* 1.144 Chromium* 19.192	1.30E-01	1.15E-05	3 76E-07			4.94E-06	1.61E-07	7.3E-01	1E-07		
Pyrene 1 08 Beryllium* 1 144 Chromium* 19 192	1.30E-01	1.15E-05	9.19E-07	2 0E-02	5E-05	4.94E-06	3.94E-07				
3eryllium* 1 144 Chromium* 19 192	1.30E-01	1.15E-05	8 70E-07			4 94E-06	3:73E-07				
Chromium* 19 192	1.30E-01	1.15E-05	1 62E-06	3 0E-02	5E-05	4 94E-06	6.94E-07				
									ı		
								ļ [ı		
Copper* 32 983									ı		
Mercury* 0 099]	ı		
Nickel* 32.284									:		
I hallium* 2.222									2E-06		

DERMAL CONTACT WITH SOIL

CS = Concentration of chemical in soil (mg/kg) See Table 10

ABS = Default value from Rags Part E (USEPA 2004c).

1.00E-06 CF = 0.000001 kg/mg - Conversion Factor

5.70E+03 SAa = 5 700 sq cm - Skin Surface Area available for an adult. (USEPA 2004c)

2 80E+03 SAc = 2 800 sq cm - Skin Surface Area available for an child. (USEPA 2004c)

2 40E+01 EDa = 24 yr - Exposure Duration for an adult. (USEPA 1991)

6.00E+00 EDc = 6 yr - Exposure Duration for a child (USEPA 1991)

3 50E+02 EFa = 350 days/yr - Exposure Frequency for an adult. (USEPA 1991)

3 50E+02 EFc = 350 days/yr - Exposure Frequency for a child. (USEPA 1991)

7.00E+01 BWa = 70 kg - Body Weight for an adult (USEPA 1991)

1 50E+01 BWc = 15 kg - Body Weight for a child (USEPA 1991)

1 095E+04 AIn = 10 950 days - Averaging Time for noncarcinogenic compounds (USEPA 1991)

2 555E+04 ATc = 25 550 days - Averaging Time for carcinogenic compounds (USEPA 1991)

7 00E-02 AFa = 0 07 mg/cm2 - Soil to Skin Adherence Factor (USEPA 2004c)

2 00E-01 AFc = 0 2 mg/cm2 - Soil to Skin Adherence Factor. (USEPA 2004c) 1.15E-05 HIF = ((SAa * EFa * EDa * AFa / BWa) + (SAc * EFc * EDc* AFc / BWc)) * CF / (ATn)

4 94E-06 HIF = ((SAa * EFa * Eda * AFa / BWa) + (SAc * EFc * Edc * AFc / BWc)) * CF / (ATc)

DAILY INTAKE = (CS * ABS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

NOTE:

* BTEX compounds and inorganics excluded from dermal risk assessment (USEPA 2004c)

HIF-NONCARCINOGENIC---->

HIF--CARCINOGENIC-----

Inhalation of Chemicals in Fugitive Dust

Reasonable Maximum Exposure (RME)

Post-Remediation Resident 2

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Chemicals Of (CS) (HHF) Intake RPC (mg/m² mg/kg-day unitless RPD (HQ) (HIF) Intake or J Marke-face mg/kg kg/kg-day mg/kg-day unitless RPD (HQ) (HIF) Intake or J Marke-face mg/kg kg/kg-day mg/kg-day unitless RPD (HQ) (HIF) Intake or J Marke-face mg/kg kg/kg-day mg/kg-day unitless RPD (HQ) (HIF) Intake or J Marke-face mg/kg day mg/kg-day unitless RPD (HQ) (HIF) Intake or J Marke-face mg/kg day mg/kg-day unitless RPD (HQ) (HIF) Intake or J Marke-face mg/kg day mg/kg-day unitless RpAg-day mg/kg-day mg/kg-day UR (ug/m²)¹ unitless RpAg-day mg/kg-day mg/kg-day unitless RpAg-day mg/kg-day mg/kg-day unitless RpAg-day mg/kg-day mg/kg-day mg/kg-day unitless RpAg-day mg/kg-day mg/kg-day mg/kg-day unitless RpAg-day mg/kg-day mg/kg-day mg/kg-day unitless RpAg-day mg/kg-day mg/kg-day mg/kg-day unitless RpAg-day mg/kg-day mg/kg-day mg/kg-day unitless RpAg-day mg/kg-day mg/kg-day mg/kg-day unitless RpAg-day mg/kg-day mg/kg-day mg/kg-day unitless RpAg-day mg/kg-day mg/kg-day unitless RpAg-day mg/kg-day mg/kg-day unitless RpAg-day mg/kg-day mg/kg-day unitless RpAg-day mg/kg-day mg/kg-day unitless RpAg-day mg/kg-day mg/kg-day unitless RpAg-day mg/kg-day unitless RpAg-day mg/kg-day unitless RpAg-day mg/kg-day unitless RpAg-day mg/kg-day unitless RpAg-day mg/kg-day unitless RpAg-day unitless RpAg-day mg/kg-day unitless RpAg-day unitles RpAg-day unitles RpAg-day unitles RpAg-day unitles RpAg-day unitles RpAg-day unitles RpAg-day unitles RpAg-day unitles RpAg-day unitles RpAg-day unitles RpAg-day unitles RpAg-day unitles R	· · · · · · · · · · · · · · · · · · ·			Chroni	c Noncarcinoger	ic Effects			Lifetime Car	cinogenic Effects	
October Color Co		RME	Human				Hazard	Human		1 1	
Potential Concern mg/kg kg/kg-day mg/kg-day ng/kg-da	Chemicals	Conc	Intake Factor	Daily	Inhalation	Inhalation	Quotient	Intake Factor	Daily	SF (mg/kg-day) ⁻¹	Inhalation
Potential Concern ng/kg kg/kg-day ng/kg-day	of	(CS)	(HIF)	Intake	RfC	RfD	(HQ)	(HIF)	Intake	1 .	Risk
Retroite 0.113 2.052-10 2.37E-12 3.0E-02 8.6E-03 3E-10 1.13E-10 3.27E-12 2.7E-02 3.2E-02 3.2E-03 3.2E-10 3.2E-12 3.0E-02 3.2E-12 3.0E-02 3.2E-12 3.0E-02 3.2E-12 3.2E-02 3.2E-			kg/kg-day	mg/kg-day	mg/m ³	mg/kg-day	unitless	kg/kg-day	mg/kg-day	UR (ug/m ³) ⁻¹	unitless
Selection Color	Acetone	0.113	2 63E-10	2.97E-11				1.13E-10	1.27E-11		
Second process Seco	Benzene	0.009	2 63E-10	2 37E-12	3.0E-02	8 6E-03	3E-10	1.13E-10	1 01E-12	2 7E-02	3E-14
Accenaphthene 0074 2 63E-10 195E-11 13E-10 5 86E-12 1 13E-10 5 86E-12 1 13E-10 5 86E-12 1 13E-10 13E-10 13E-10 13E	2-Butanone	0 029	2 63E-10	7 62E-12	5 0E+00	1 4E+00	5E-12	1 13E-10	3 27E-12		
Accenaphthylene Accenaphthylene Accenaphthylene O052 2 63E-10 137E-11 Anthracene 0 115 2 63E-10 3 02E-11 Benzo(a)anthracene (1, 2) 0 299 7 26E-10 2 17E-10 Benzo(b)fluoranthene (1, 2) 0 268 7 26E-10 1 19E-10 1 13E-10 3 11E-10 3	o-Xylene	0 009	2.63E-10	2 37E-12	1.0E-01	2 9E-02	8E-11	1.13E-10	1.01E-12		
Achtracene 0 115	Acenaphthene	0 074	2.63E-10	1.95E-11				1.13E-10	8.34E-12		
Benzo(a)nthracene (1, 2)	Acenaphthylene	0.052	2 63E-10	1.37E-11				1.13E-10			
Benzo(a)antinacene (1, 2)	Anthracene	0.115	2 63E-10	3 02E-11				1 13E-10	1 30E-11		
Senzo(s) Thoranthene (1,2) O268 726E-10 191E-10 Senzo(s) Thoranthene (1,2) O268 726E-10 191E-10 Senzo(s) Thoranthene (1,2) O344 263E-10 904E-11 Senzo(a) Thoranthene (1,2) O342 726E-10 227E-10 Senzo(a) Thoranthene (1,2) O532 726E-10 386E-10 Senzo(a) Thoranthene (1,2) O532 726E-10 386E-10 Senzo(a) Thoranthene (1,2) O63 726E-10 458E-11 Senzo(a) Thoranthene (1,2) O63 726E-10 458E-11 Senzo(a) Thoranthene (1,2) O63 726E-10 Senzo(a) Thoranthene (1,2) O63 726E-10 Senzo(a) Thoranthene (1,2) O63 O63E-10 O63	Benzo(a)anthracene (1, 2)	0 299	7 26E-10	2 17E-10				3.11E-10	931E-11		8E-15
Senzo(g) Thoranthene (1,2)	Benzo(b)fluoranthene (1,2)	0 268	7.26E-10	1.95E-10				3.11E-10	8 34E-11	8 8E-05	7E-15
Selezio (a) pyrene (1. 2) Selezio (2) pyrene (1. 2) Selezio (3) pyrene (1. 2) Selezio (3) pyrene (1. 2) Selezio (3) pyrene (1. 2) Selezio (3) pyrene (1. 2) Selezio (3) pyrene (1. 2) Selezio (3) sele	Benzo(k)fluoranthene (1,2)	0.263	7.26E-10	1.91E-10				3.11E-10	8.19E-11	8.8E-06	7E-16
Senzo(a)pyrene (1.2)	Benzo(g,h,i)perylene	0.344	2 63E-10	9 04E-11				1 13E-10	1		
Chrysene (1, 2) 0532 726E-10 3 58E-10 3 58E-10 196E-11 13E-10 196E-11 8 8E-04 2 113E-10 196E-11 8 8E-04 2 113E-10 196E-11 13E-10 125E-11 13E-10 125E-11 13E-10 125E-11 13E-10 196E-11 13E-10 125E-11 13E-10 196E-11 196E-11 19	Benzo(a)pyrene (1. 2)	0.312	7 26E-10	2 27E-10				3 11E-10	1		9E-14
Dibenzo(a,h)anthracene (1, 2)	Chrysene (1, 2)	0 532	7.26E-10	3.86E-10				3.11E-10		i .	1E-16
1 1 2 1 2 1 2 1 2 1 2 2	Dibenzo(a,h)anthracene (1, 2)	0 063	7.26E-10	4.58E-11				3.11E-10		8 8E-04	2E-14
1 2 3 1 2 2	Fluoranthene	0.763	2.63E-10	2.01E-10				1 13E-10	l		
Naphthalene(1)	Fluorene	0.111	2 63E-10	2.92E-11				1 13E-10	1 25E-11		
Aspirinate Asp	Indeno(1,2,3-cd)pyrene (1, 2)	0 251	7.26E-10	1 82E-10				3.11E-10	78IE-11	8 8E-05	7E-15
Per Nemantanian (1)	Naphthalene(1)	0.613	7 26E-10	4.45E-10	3.0E-03		1E-07	3.11E-10	1.91E-10		
Second S	Phenanthrene	0.58	2.63E-10	1.52E-10				1 13E-10	6.54E-11		
1144 726E-10 831E-10 20E-03 4E-03 31E-10 598E-09 12E-02 50E-03 50E-04 50E-05 5	Pyrene	1 08	2.63E-10	2.84E-10				1.13E-10	1.22E-10		
Copper 32 983 2 63E-10 8 67E-09 1 13E-10 3.72E-09 1 13E-10 3.72E-09 1 13E-10 3.72E-09 1 13E-10 1.12E-11 Nickel 32 284 2 63E-10 8 49E-09 1 1.3E-10 3 64E-09 1 1.3E-10 3 64E-09	Beryllium (1, 2)	1.144	7 26E-10	8 31E-10	2.0E-05		4E-05	3.11E-10	i		9E-10
Mercury 0 0 99 2 63E-10 2 60E-11 3 0E-04 8 6E-05 3E-07 1 13E-10 1.12E-11 Nickel 32 284 2 63E-10 8 49E-09 1.13E-10 3 64E-09	Chromium (1, 2, 3)	19.192	7 26E-10	1 39E-08	1.0E-04		1E-04			1 2E-02	7E-08
Nickel 32 284 2.63E-10 8.49E-09 1.13E-10 3.64E-09	Соррег	32 983	2 63E-10	8.67E-09					1		
32.04 2.052.10	Mercury	0 099	2.63E-10	2.60E-11	3.0E-04	8.6E-05	3E-07	H	l .		
Thatlium 2.222 2.63E-10 5.84E-10 1.13E-10 2.50E-10	Nickel	32 284	2.63E-10	8.49E-09				1	i .		
	I hallium	2.222	2.63E-10	5.84E-10				1.13E-10		L	7E-08

INHALATION DUE TO FUGITIVE DUST

CS = Concentration of chemical in soil (mg/kg). See Table 10

1.32E+09 PEF = $1.320\,000\,000$ m 3 /kg - Particulate Emission Factor (IAC 2002)

2.00E+01 IRa = $20 \text{ m}^3/\text{day}$ -Inhalation Rate of an adult (USEPA 1991)

1 00E+01 $\,$ IRc = 10 $\,$ m 3 /day - Inhalation Rate of a child (USEPA 1997a) 3 50E+02 EFa = 350 days/yr - Exposure Frequency for an adult (USEPA 1991)

3 50E+02 EFc = 350 days/yr - Exposure Frequency for a child (USEPA 1991)

2 40E+01 EDa = 24 yr - Exposure Duration for an adult (USEPA 1991)

6 00E+00 EDc = 6 yr - Exposure Duration for a child (USEPA 1991)

7 00E+01 BWa = 70 kg \sim Body Weight for an adult (USEPA 1991)

1 50E+01 BWc = 15 kg - Body Weight for a child (USEPA 1991)

1 095E+04 ATn = 10 950 days - Averaging Time for noncarcinogenic compounds (USEPA 1991)

2.555E+04 ATc =25 550 days - Averaging Time for carcinogenic compounds. (USEPA 1991)

2.63E-10~HiF = (((IRa*EFa*EDa)/BWa) + ((IRc*EFc*EDc)/BWc))/(PEF*ATn)

1 13E-10 HIF = (((IRa * EFa * EDa) / BWa) + ((IRc * EFc * EDc) / BWc)) / (PEF * ATc)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

FOR NAPH THALENE. BERYLLIUM AND CHROMIUM:

HIF--NONCARCINOGENIC----> HIF-CARCINOGENIC---->

HIF-NONCARCINOGENIC--->

HIF--CARCINOGENIC---->

7 26E-10 HIF = ((EFa * EDa) + (EFc * EDc)) / (PEF * AIn)

3 11E-10 HIF = ((EFa * EDa) + (EFc * EDc)) / (PEF * ATc)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfC)

RISK (carcinogenic) = (1NTAKE * UR * 1000 ug/mg)

NOTES:

- (1) Units for HIF are kg/m³ and units for Daily Intake are mg/m³
- (2) Unit Risk (UR) (ug/m 3) 1 is used to calculate carcinogenic risk
- (3) Chromium concentration is total chromium. RfC and UR are for chromium VI particulates

Inhalation of Chemicals in Vapor Phase

Reasonable Maximum Exposure (RME)

Post-Remediation Resident 2

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Volati-		Non	carcinogenic Ef	fects		İ	Lifetime Car	cinogenic Effects	
	RME	zation	Human					Human		Inhalation	
	Conc	Factor	Intake Factor	Daily	Inhalation	Inhalation	Hazard	Intake Factor	Daily	Slope Factor (SF)	Inhalation
Chemicals	(CS)	(VF)	(HIF)	Intake	RfC	RfD	Quotient	(HIF)	Intake	(mg/kg-day) 1	Risk
of			m³/kg-day OR	mg/kg-day OR			(HQ)	m ³ /kg-day OR	mg/kg-day OR	or Unit Risk (UR)	
Potential Concern	mg/kg	m³/kg	unitless *	mg/m ³ *	mg/m³ "	mg/kg-day	unitless	unitless *	mg/m³ *	(ug/m ³) ⁻¹	unitless
Acetone	0 113	471E+04	3 47E-01	8.33E-07				1 49E-01	3 57E-07		
Benzene	0 009	8 38E+03	3 47E-01	3.73E-07	3.0E-02	8 6E-03	4E-05	1 49E-01	1.60E-07	2 7E-02	4E-09
2-Butanone	0 029	5 84E+04	3 47E-01	1 72E-07	5.0E+00	1 4E+00	1E-07	1 49E-01	7.38E-08		
o-Xylene	0 009	1 46E+04	3.47E-01	2 14E-07	1 0E-01	2.9E-02	7E-06	1.49E-01	9.18E-08		
Naphthalene*	0.613	1.17E+05	9.59E-01	5.02E-06	3.0E-03		2E-03	4.11E-01	2.15E-06		

INHALATION OF CHEMICALS IN VAPOR PHASE

CS = Concentration of chemical in soil (mg/kg) See Table 10.

VF ≈ Volatization factor. See Table 14

2 00E+01 IRa = 20 m³/day - Inhalation Rate of an adult. (USEPA 1991)

1 00E+01 IRc = 10 m³/day - Inhalation Rate of a child (USEPA 1997a)

3.50E+02 EFa = 350 days/yr - Exposure Frequency for an adult (USEPA 1991)

3 50E+02 EFc = 350 days/yr - Exposure Frequency for a child (USEPA 1991)

2.40E+01 EDa = 24 yr - Exposure Duration for an adult (USEPA 1991)

6 00E+00 EDc = 6 yr - Exposure Duration for a child (USEPA 1991)

7.00E+01 BWa = 70 kg - Body Weight for an adult. (USEPA 1991)

1 50E+01 BWc = 15 kg - Body Weight for a child (USEPA 1991)

1 095E+04 ATn = 10 950 days - Averaging Time for noncarcinogenic compounds. (USEPA 1991)

2 555E+04 ATc =25 550 days - Averaging Time for carcinogenic compounds (USEPA 1991)

347E-01 HIF = (((IRa * EFa * EDa) / BWa) + ((IRc * EFc * EDc) / BWc)) / (AIn)

 $1.49\text{E-O1} \;\; HIF = (((IRa * EFa * EDa) / BWa) + ((IRc * EFc * EDc) / BWc)) / (ATc)$

DAILY INTAKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

* FOR NAPHTHALENE:

HIF--CARCINOGENIC----

TOR NAPHTHALENE.

HIF-NONCARCINOGENIC---->

HIF--NONCARCINOGENIC----->

HIF--CARCINOGENIC---->

9 59E-01 HIF = ((EFa * EDa) + (EFc * EDc)) / (ATn) 4 11E-01 HIF = ((EFa * EDa) + (EFc * EDc)) / (ATc)

DAILY INTAKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (INTAKE / RfC)

RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

Incidental Ingestion of Soil

Central Tendency (CT)

Post-Remediation Resident 2

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Chronic Nonca	rcinogenic Effec	ts		Lifetime Carci	nogenic Effects	
	RME	Human			Hazard	Human		Oral	
Chemicals	Conc	Intake Factor	Daily	Oral	Quotient	Intake Factor	Daily	Slope	
of	(CS)	(HIF)	Intake	RfD	(HQ)	(HIF)	Intake	Factor	Risk
Potential Concern	mg/kg	kg/kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day) ⁻¹	unitless
Acetone	0 113	1.95E-06	2.21E-07	9.0E-01	2E-07	2 51E-07	2 84E-08		
Benzene	0.009	1.95E-06	1 76E-08	4 0E-03	4E-06	2.51E-07	2 26E-09	5 5E-02	1E-10
2-Butanone	0.029	1.95E-06	5 66E-08	6 0E-01	9E-08	2.51E-07	7 28E-09		
o-Xylene	0.009	1 95E-06	1 76E-08	2 0E-01	9E-08	2.51E-07	2.26E-09		
Acenaphthene	0.074	1 95E-06	1.45E-07	6 0E-02	2E-06	2.51E-07	1.86E-08		
Acenaphthylene	0.052	1 95E-06	1.02E-07			2 51E-07	1.31E-08		
Anthracene	0.115	1 95E-06	2.25E-07	3.0E-01	7E-07	2 51E-07	2.89E-08		
Benzo(a)anthracene	0.299	1 95E-06	5.84E-07			2 51E-07	7 51E-08	7 3E-01	5E-08
Benzo(b)fluoranthene	0.268	1 95E-06	5 23E-07			2 51E-07	6 73E-08	7 3E-01	5E-08
Benzo(k)fluoranthene	0.263	1.95E-06	5.14E-07			2.51E-07	6.61E-08	7.3E-02	5E-09
Benzo(g,h,i)perylene	0 344	1.95E-06	6.72E-07		1	2.51E-07	8.64E-08		
Benzo(a)pyrene	0 312	1.95E-06	6 09E-07			2.51E-07	7 84E-08	7.3E+00	6E-07
Chrysene	0 532	1.95E-06	1 04E-06			2.51E-07	1.34E-07	7 3E-03	1E-09
Dibenzo(a,h)anthracene	0 063	1.95E-06	1 23E-07			2.51E-07	1.58E-08	7 3E+00	1E-07
Fluoranthene	0:763	1.95E-06	1 49E-06	4 0E-02	4E-05	2 51E-07	1 92E-07		
Fluorene	0.111	1.95E-06	2 17E-07	4 0E-02	5E-06	2 51E-07	2 79E-08		
Indeno(1,2,3-cd)pyrene	0.251	1 95E-06	4.90E-07			2 51E-07	6 30E-08	7.3E-01	5E-08
Naphthalene	0.613	1 95E-06	1 20E-06	2.0E-02	6E-05	2.51E-07	1 54E-07		
Phenanthrene	0.58	1 95E-06	1.13E-06			2.51E-07	1.46E-07		
Pyrene	1.08	1 95E-06	2.11E-06	3.0E-02	7E-05	2.51E-07	2.71E-07		
Beryllium	1 144	1.95E-06	2.23E-06	2.0E-03	1E-03	2.51E-07	2.87E-07		
Chromium*	19.192	1 95E-06	3 75E-05	3.0E-03	1E-02	2 51E-07	4 82E-06		
Copper	32 983	1.95E-06	6 44E-05	4 0E-02	2E-03	2 51E-07	8 28E-06	[
Mercury	0 099	1.95E-06	1 93E-07			2 51E-07	2.49E-08		
Nickel	32 284	1.95E-06	6 31E-05	2 0E-02	3E-03	2 51E-07	8.11E-06	1	
Thallium	2.222	1.95E-06	4.34E-06			2.51E-07	5.58E-07		
		Total Pathway	Hazard Index	>	2E-02		Total Pathway	Risk>	8E-07

INCIDENTAL INGESTION OF SOIL

CS = Concentration of chemical in soil (mg/kg). See Table 10

1 00E-06 CF = 0 000001 kg/mg - Conversion Factor

5~00E+01~ IRa = 50~mg/day - Ingestion Rate of soil by an adult, (USEPA 1991)

1 00E+02 IRc = 100 mg/day - Ingestion Rate of soil by a child, (USEPA 1991)

7 00E+00 EDa = 7 yr - Exposure Duration for an adult, (USEPA 1991)

2 00E+00 EDc = 2 yr - Exposure Duration for a child, (USEPA 1991)

3 50E+02 EFa = 350 days/yr - Exposure Frequency for an adult, (USEPA 1991)
3 50E+02 EFc = 350 days/yr - Exposure Frequency for a child, (USEPA 1991)

7 00E+01 BWa = 70 kg - Body Weight for an adult, (USEPA 1991)

1 500E+01 BWc = 15 kg - Body Weight for a child, (USEPA 1991)

3 285E+03 ATn = 3,285 days - Averaging Time for noncarcinogenic compounds, (USEPA 1991)

2 555E+04 ATc = 25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

1.00E+00 FIa = 1 - Fraction Ingested, (USEPA 1989)

1 00E+00 Fic = 1 - Fraction Ingested (USEPA 1989)

1 95E-06 HIF = ((IRa * EFa * EDa * FIa / BWa) + (IRc * EFc * EDc * FIc / BWc)) * CF / (A In)

2 51E-07 HIF = ((IRa * EFa * EDa * FIa / BWa) + (IRc * EFc * EDc * FIc / BWc)) * CF / (AIc)

DAILY INTAKE = (CS * HIF)

HIF-NONCARCINOGENIC----->

HIF-CARCINOGENIC---

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

^{*} Chromium concentration is total chromium, RfD is for chromium VI particulates.

Dermal Contact with Soil

Central Tendency (CT)

Post-Remediation Resident 2

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

				Chronic Nonca	rcinogenic Effec	ets	Lifetime Carcinogenic Effects			
	RME	Absorption	Human		Adjusted	Hazard	Human		Adjusted	
Chemicals	Conc	Factor	Intake Factor	Daily	Dermal	Quotient	Intake Factor	Daily	Dermal	
of	(CS)	(ABS)	(HUF)	Intake	RfD	(HQ)	(HIF)	Intake	Slope Factor	Risk
Potential Concern	mg/kg	unitless	kg/kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	kg-day/mg	unitless
Acetone*	0.113									
Benzene*	0.009									
2-Butanone*	0.029									
o-Xylene*	0 009									
Acenaphthene	0 074	1 30E-01	2.20E-06	2 11E-08	6 0E-02	4E-07	2.83E-07	2.72E-09		
Acenaphthylene	0 052	1 30E-01	2.20E-06	1 49E-08			2.83E-07	1 91E-09		
Anthracene	0 115	1.30E-01	2 20E-06	3 29E-08	3 0E-01	1E-07	2.83E-07	4 23E-09		
Benzo(a)anthracene	0 299	1.30E-01	2 20E-06	8 55E-08			2 83E-07	1 10E-08	7.3E-01	8E-09
Benzo(b)fluoranthene	0.268	1.30E-01	2 20E-06	7.66E-08			2 83E-07	9.85E-09	7.3E-01	7E-09
Benzo(k)fluoranthene	0.263	1 30E-01	2 20E-06	7.52E-08			2.83E-07	9.66E-09	7.3E-02	7E-10
Benzo(g,h,i)perylene	0.344	1 30E-01	2 20E-06	9.83E-08			2.83E-07	1.26E-08		
Benzo(a)pyrene	0.312	1 30E-01	2 20E-06	8.92E-08			2.83E-07	1 15E-08	7 3E+00	8E-08
Chrysene	0.532	1 30E-01	2.20E-06	1.52E-07			2.83E-07	1 95E-08	7 3E-03	1E-10
Dibenzo(a,h)anthracene	0 063	1 30E-01	2.20E-06	1 80E-08			2.83E-07	2 31E-09	7.3E+00	2E-08
Fluoranthene	0 763	1 30E-01	2 20E-06	2 18E-07	4 0E-02	5E-06	2 83E-07	2.80E-08		
Fluorene	0.111	1.30E-01	2 20E-06	3 17E-08	4.0E-02	8E-07	2 83E-07	4.08E-09		[
Indeno(1,2,3-cd)pyrene	0 251	1.30E-01	2 20E-06	7.17E-08			2.83E-07	9 22E-09	7 3E-01	7E-09
Naphthalene	0.613	1.30E-01	2 20E-06	1.75E-07	2.0E-02	9E-06	2.83E-07	2 25E-08		
Phenanthrene	0.58	1.30E-01	2.20E-06	1.66E-07			2.83E-07	2.13E-08		
Pyrene	1.08	1 30E-01	2.20E-06	3 09E-07	3 0E-02	1E-05	2 83E-07	3.97E-08		
Beryllium*	1.144									ł
Chromium*	19 192									
Copper*	32 983									
Mercury*	0 099						1			
Nickel*	32 284									
Thallium*	2.222								<u> </u>	
			Total Pathway	Hazard Index	>	3E-05		Total Pathway	Risk>	1E-07

DERMAL CONTACT WITH SOIL

CS = Concentration of chemical in soil (mg/kg). See Table 10.

ABS = Default value from Rags Part E (USEPA 2004c)

1 00E-06 CF = 0 000001 kg/mg - Conversion Factor

5.70E+03 SAa = 5,700 sq cm - Skin Surface Area available for an adult, (USEPA 2004c)

2 80E+03 SAc = 2,800 sq cm - Skin Surface Area available for an child, (USEPA 2004c)

7 00E+00 EDa = 7 yr - Exposure Duration for an adult, (USEPA 1991)

2 00E+00 $\,$ EDc = 2 yr - Exposure Duration for a child, (USEPA 1991)

 $3\ 50E + 02\ EFa = 350\ days/yr$ - Exposure Frequency for an adult, (USEPA 1991)

 $3\,\,50E+02$ $\,$ EFc = $350\,$ days/yr - Exposure Frequency for a child, (USEPA 1991)

7.00E+01 BWa = 70 kg - Body Weight for an adult, (USEPA 1991)

1 50E+01 BWc = 15 kg - Body Weight for a child, (USEPA 1991)

 $3\ 285E + 03\ A\,Tn = 3\ 285\ days$ - Averaging Time for noncarcinogenic compounds, (USEPA 1991)

2 555E+04 ATc = 25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991) 1 00E-02 AFa = 0 01 mg/cm2 - Soil to Skin Adherence Factor (USEPA 2004c)

 $4\,00\text{E-}02~\text{AFc} = 0~04~\text{mg/cm2}$ - Soil to Skin Adherence Factor, (USEPA 2004c)

2.20E-06~HJF = ((SAa*EFa*Eda*AFa/BWa) + (SAc*EFc*EDc*AFc/BWc))*CF/(AIn)

2 83E-07 HIF = ((SAa * EFa * EDa * AFa / BWa) + (SAc * EFc * EDc * AFc / BWc)) * CF / (A1c)

DAILY INTAKE = (CS * ABS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

NOTE

HIF-NONCARCINOGENIC---

HIF-CARCINOGENIC---

* BIEX compounds and inorganics excluded from dermal risk assessment (USEPA 2004c)

Inhalation of Chemicals in Fugitive Dust

Central Iendency (CT)

Post-Remediation Resident 2

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Chroni	c Noncarcinoger	nic Effects		Lifetime Carcinogenic Effects				
	RME	Human				Hazard	Human		Inhalation		
Chemicals	Conc	Intake Factor	Daily	Inhalation	Inhalation	Quotient	Intake Factor	Daily	SF (mg/kg-day) ⁻¹	Inhalation	
of	(CS)	(HIF)	Intake	RfC	RfD	(HQ)	(HIF)	Intake	or	Risk	
Potential Concern	mg/kg	kg/kg-day	mg/kg-day	mg/m³	mg/kg-day	unitless	kg/kg-day	mg/kg-day	UR (ug/m ³) ⁻¹	unitless	
Acetone	0.113	2.69E-10	3.04E-11				3 46E-11	3.91E-12			
Benzene	0 009	2.69E-10	2.42E-12	3 0E-02	8.6E-03	3E-10	3.46E-11	3.11E-13	2.7E-02	8E-15	
2-Butanone	0 029	2 69E-10	7.80E-12	5.0E+00	14E+00	5E-12	3.46E-11	1 00E-12			
o-Xylene	0 009	2 69E-10	2.42E-12	1.0E-01	2.9E-02	8E-11	3.46E-11	3.11E-13			
Acenaphthene	0.074	2.69E-10	1.99E-11				3.46E-11	2.56E-12			
Acenaphthylene	0.052	2.69E-10	1 40E-11				3.46E-11	1.80E-12			
Anthracene	0.115	2.69E-10	3 09E-11				3 46E-11	3.98E-12			
Benzo(a)anthracene (1, 2)	0.299	7.26E-10	2 17E-10				9 34E-11	2.79E-11	8.8E-05	2E-15	
Benzo(b)fluoranthene (1,2)	0.268	7.26E-10	1 95E-10				9 34E-11	2 50E-11	8.8E-05	2E-15	
Benzo(k)fluoranthene (1,2)	0.263	7.26E-10	1 91E-10				9 34E-11	2 46E-11	8.8E-06	2E-16	
Benzo(g,h,i)perylene	0.344	2.69E-10	9 26E-11				3.46E-11	1.19E-11			
Benzo(a)pyrene (1, 2)	0.312	7 26E-10	2.27E-10				9.34E-11	2.91E-11	8 8E-04	3E-14	
Chrysene (1, 2)	0 532	7 26E-10	3.86E-10				9.34E-11	4.97E-11	8.8E-07	4E-17	
Dibenzo(a,h)anthracene (1, 2)	0 063	7 26E-10	4.58E-11				9.34E-11	5.88E-12	8.8E-04	5E-15	
Fluoranthene	0:763	2.69E-10	2.05E-10				3 46E-11	2.64E-11		*	
Fluorene	0.111	2.69E-10	2 99E-11				3.46E-11	3 84E-12			
Indeno(1,2,3-cd)pyrene (1, 2)	0.251	7.26E-10	1 82E-10				9.34E-11	2.34E-11	8 8E-05	2E-15	
Naphthalene(1)	0.613	7.26E-10	4 45E-10	3 0E-03		1E-07	9.34E-11	5.73E-11			
Phenanthrene	0.58	2.69E-10	1 56E-10				3.46E-11	2.01E-11	1		
Pyrene	1 08	2.69E-10	2.91E-10				3 46E-11	3.74E-11			
Beryllium (1, 2)	1 144	7 26E-10	8.31E-10	2.0E-05		4E-05	9 34E-11	1 07E-10	2.4E-03	3E-10	
Chromium (1, 2, 3)	19 192	7 26E-10	1.39E-08	1.0E-04		1E-04	9 34E-11	1 79E-09	1.2E-02	2E-08	
Copper	32 983	2 69E-10	8.87E-09				3.46E-11	1 14E-09			
Mercury	0 099	2.69E-10	2 66E-11	3 0E-04	8.6E-05	3E-07	3.46E-11	3.42E-12			
Nickel	32 284	2.69E-10	8 69E-09				3.46E-11	1.12E-09			
Thallium	2.222	2.69E-10	5,98E-10			2E-04	3.46E-11	7.69E-11	1		
		Total Pathway Hazard Index>					1	Total Pathway	2E-08		

INHALATION DUE TO FUGITIVE DUST

CS = Concentration of chemical in soil (mg/kg) See Table 10

1 32E+09 PEF = 1,320,000,000 m³/kg - Particulate Emission Factor, (IAC 2002)

2.00E+01 Ra = 20 m^3 /day - Inhalation Rate of an adult, (USEPA 1991)

 $1\ 00E+01$ Rc = $10\ m^3$ /day - Inhalation Rate of a child, (USEPA 1997a) $3\ 50E+02$ EFa = $350\ days/yr$ - Exposure Frequency for an adult, (USEPA 1991)

3 50E+02 EFc = 350 days/yr - Exposure Frequency for a child, (USEPA 1991)

7.00E+00 EDa = 7 yr - Exposure Duration for an adult, (USEPA 1991)

2 00E+00 EDc = 2 yr - Exposure Duration for a child, (USEPA 1991)

7.00E+01 BWa = 70 kg - Body Weight for an adult, (USEPA 1991)

1.50E+01 BWc = 15 kg - Body Weight for a child, (USEPA 1991)

3 285E+03 AIn = 3,285 days - Averaging Time for noncarcinogenic compounds, (USEPA 1991) 2 555E+04 AIc = 25,550 days - Averaging Time for carcinogenic compounds. (USEPA 1991)

2 69E-10 HIF = (((IRa * EFa * EDa) / BWa) + ((IRc * EFc * EDc) / BWc)) / (PEF * ATn)

3.46E-11~HiF = (((IRa*EFa*EDa)/BWa) + ((IRc*EFc*EDc)/BWc))/(PEF*AIc)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

FOR NAPHTHALENE, BERYLLIUM, AND CHROMIUM:

HIF-NONCARCINOGENIC---->
HIF-CARCINOGENIC---->

HIF--NONCARCINOGENIC---

HIF--CARCINOGENIC---

7 26E-10 HIF = ((EFa * EDa)+(EFc * EDc)) / (PEF * AIn)

9 34E-11 HIF = ((EFa * EDa)+(EFc * EDc)) / (PEF * A Ic)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfC)

RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

NOTES:

(1) Units for Hiff are kg/m³ and units for Daily Intake are mg/m³.

(2) Unit Risk (UR) (ug/m 3) 1 is used to calculate carcinogenic risk

(3) Chromium concentration is total chromium, RfC and UR are for chromium VI particulates

Inhalation of Chemicals in Vapor Phase

Central Tendency (CT)

Post-Remediation Resident 2

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

		Volati-	Noncarcinogenic Effects					Lifetime Carcinogenic Effects			
	ст	zation	Human					Human		Inhalation	
	Conc	Factor	Intake Factor	Daily	Inhalation	Inhalation	Hazard	Intake Factor	Daily	Slope Factor (SF)	Inhalation
Chemicals	(CS)	(VF)	(HIF)	Intake	RfC	RfD	Quotient	(HIF)	Intake	(mg/kg-day) ⁻¹	Risk
of	(,		m ³ /kg-day OR	mg/kg-day OR			(HQ)	m ³ /kg-day OR	mg/kg-day OR	or Unit Risk (UR)	
Potential Concern	mg/kg	m ³ /kg	unitless *	mg/m³*	mg/m³ *	mg/kg-day	unitless	unitless *	mg/m³*	(ug/m ³) ⁻¹ *	unitless
Acetone	0 113	2.56E+04	3 55E-01	1.57E-06				4.57E-02	2 02E-07		
Benzene	0 009	4.55E+03	3.55E-01	7.02E-07	3.0E-02	8 6E-03	8E-05	4.57E-02	9.03E-08	2.7E-02	2E-09
2-Butanone	0.029	3.17E+04	3.55E-01	3.25E-07	5.0E+00	1.4E+00	2E-07	4.57E-02	4.18E-08		
o-Xylene	0.009	7 92E+03	3.55E-01	4 04E-07	1 0E-01	2.9E-02	1E-05	4.57E-02	5.19E-08		
Naphthalene*	0.613	6.36E+04	9.59E-01	9.24E-06	3.0E-03		3E-03	1.23E-01	1.19E-06		
Total Pathway Hazard Index>							3E-03		2E-09		

INHALATION OF CHEMICALS IN VAPOR PHASE

CS = Concentration of chemical in soil (mg/kg). See Table 10

VF = Volatization factor. See Table 14

2.00E+01 IRa = 20 m^3 /day - Inhalation Rate of an adult. (USEPA 1991)

1.00E+01 IRc = 10 m^3 /day - Inhalation Rate of a child, (USEPA 1997a)

3 50E+02 EFa = 350 days/yr - Exposure Frequency for an adult, (USEPA 1991)

3 50E+02 EFc = 350 days/yr - Exposure Frequency for a child, (USEPA 1991)

7 00E+00 EDa = 7 yr - Exposure Duration for an adult, (USEPA 1991)

2 00E+00 EDc = 2 yr - Exposure Duration for a child, (USEPA 1991)

7 00E+01 BWa = 70 kg - Body Weight for an adult, (USEPA 1991) 1 50E+01 BWc = 15 kg - Body Weight for a child, (USEPA 1991)

3 285E+03 ATn = 3,285 days - Averaging Time for noncarcinogenic compounds, (USEPA 1991)

2 555E+04 AIc =25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

3 55E-01 HIF = (((IRa * EFa * EDa) / BWa) + ((IRc * EFc * EDc) / BWc)) / (A In)

4 57E-02 HIF = (((IRa * EFa * EDa) / BWa) + ((IRc * EFc * EDc) / BWc)) / (ATc)

DAILY INTAKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

* FOR NAPHIHALENE:

HIF-NONCARCINOGENIC----

HIF-CARCINOGENIC-

HIF-NONCARCINOGENIC---->

HIF-CARCINOGENIC----->

9 59E-01 HIF = ((EFa * EDa) + (EFc * EDc))/(AIn)

1 23E-01 HIF = ((EFa * EDa) + (EFc * EDc))/(AIc)

DAILY INTAKE = (CS * HIF) / (VF) HQ (noncarcinogenic) = (INTAKE / RfC)

RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

Values Used For Daily Intake Calculations

Post-Remediation Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Subsurface Soil Exposure Point: Subsurface Soil Receptor Population: Utility Worker

Receptor Age: Adult

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	CT Value	CT Rationale/ Reference	Intake Equation
Ingestion	CS	Chemical Concentration in Soil	mg/kg	See Table 11	See Table 11	See Table 11	See Table 11	Daily Intake (DI) (mg/kg-day) =
	IR	Ingestion Rate of Soil	mg/day	330	USEPA 2002a	100	USEPA 1997a	CS x IR x EF x ED x FI x CF x 1/BW x 1/AT
	FI	Fraction Ingested		0.8	(1)	0.5	(1)	
	EF	Exposure Frequency	days/year	20	(1)	10	(1)	
	ED	Exposure Duration	years	1	(1)	1	(1)	
	CF	Conversion Factor (mg to kg)	kg/mg	1E-06		1E-06		
	BW	Body Weight	kg	70	USEPA 1991	70	USEPA 1991	
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	28	(1)	14	(1)	
Dermal	CS	Chemical Concentration in Soil	mg/kg	See Table 11	See Table 11	See Table 11	See Table 11	DI (mg/kg-day) =
	CF	Conversion Factor (mg to kg)	kg/mg	1E-06		1E-06		CS x SA x CF x AF x ABS x EF x ED x 1/BW x 1/AT
	AF	Soil to Skin Adherence Factor	mg/cm ²	0.9	USEPA 2004c	0.2	USEPA 2004c	
	ABS	Absorption Factor		Chemical Specific See Table 38	USEPA 2004c	Chemical Specific See Table 42	USEPA 2004c	
	SA	Skin Surface Area Available for Contact	cm ²	3,300	USEPA 2004c	3,300	USEPA 2004c	
	EF	Exposure Frequency	days/years	20	(1)	10	(1)	
	ED	Exposure Duration	years	1	(1)	1	(1)	
	вw	Body Weight	kg	70	USEPA 1991	70	USEPA 1991	
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	28	(1)	14	(1)	

Note:

(1) Assumed value based on expected activity patterns of utility worker. Work to be completed within i year. EF: RME = 4 weeks, 5 days/week. CT = 2 weeks, 5 days/week. ATn: RME = 4 weeks, 7 days/week. CT = 2 weeks, 7 days/week.

SOURCES

USEPA 1991: Risk Assessment Guidance for Superfund. Vol.1: Human Health Evaluation Manual - Supplemental Guidance, Standard Default Exposure Factors. Interim Final. OSWER Directive 9285.6-03, March 15.

USEPA 1997a: Exposure Factors Handbook: Volume I - General Factors, August.

USEPA 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER Directive 9355.4-24, December.

USEPA 2004c: Risk Assessment Guidance for Superfund. Vol.1: Human Health Evaluation Manual Part E - Supplemental Guidance for Dermal Risk Assessment, Final. OSWER Directive 9285.7-02EP, July.

Table 36 (Continued)

Values Used For Daily Intake Calculations

Post-Remediation Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Subsurface Soil Exposure Point: Subsurface Soil Receptor Population: Utility Worker

Receptor Age: Adult

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	CT Value	CT Rationale/ Reference	Intake Equation
Inhalation of	CS	COPC Concentration in Soil	mg/kg	See Table 11	See Table 11	See Table 11	See Table 11	DI (mg/kg-day) =
Fugitive Dust	IR	Inhalation Rate	m³/day	20	(1)	12	(1)	CS x IR x EF x ED/BW x AT x PEF
	PEF	Particulate Emission Factor	m³/kg	1.24E+08	IAC 2002	1.24E+08	IAC 2002	
	EF	Exposure Frequency	days/year	20	(2)	10	(2)	DI for use with RfC/UR (mg/m ³) =
	ED	Exposure Duration	years	1	(2)	1	(2)	CS x EF x ED/AT x PEF
	BW	Body Weight	kg	70	USEPA 1991	70	USEPA 1991	
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	28	(2)	14	(2)	
Inhalation of	CA	COPC Concentration in Air	mg/m ²	See Table 11	See Table 11	See Table 11	See Table 11	DI (mg/kg-day) =
Vapor Phase	VF	Volatilazion Factor	m³/kg	See Table 16	See Tables 15-16	See Table 16	See Tables 15-16	CA x IR x EF x ED/(BW x AT x VI
COPCS	IR.	Inhalation Rate	m³/day	20	(1)	12	(1)	
	EF	Exposure Frequency	days/year	20	(2)	10	(2)	
	ED	Exposure Duration	years	1	(2)	1	(2)	DI for use with RfC (mg/m ³) =
	BW	Body Weight	kg	70	USEPA 1991	70	USEPA 1991	CS x EF x ED/(AT x VF')
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	28	(2)	14	(2)	

Motes

SOURCES:

Illinois Administrative Code (IAC), 2002: Title 35: Environmental Protection, Subtitle G, Chapter I, Pollution Control Board, Subchapter f, Part 742: Tiered Approach to Corrective Action Objectives (TACO), Appendix C, Table B, February.

USEPA 1991: Risk Assessment Guidance for Superfund. Vol.1: Human Health Evaluation Manual - Supplemental Guidance, Standard Default Exposure Factors. Interum Final. OSWER Directive 9285.6-03, March 15.

USEPA 1997a: Exposure Factors Handbook: Volume 1 - General Factors, August.

⁽¹⁾ Assumes 8 hours a day of heavy activity (2.5 m³/hr) for the RME value and 8 hours of moderate activity (1.5 m²/hr) for the CT value (USEPA 1997a).

⁽²⁾ Assumed value based on expected activity patterns of utility worker. Work to be completed within 1 year. EF: RME = 4 weeks, 5 days/week. CT = 2 weeks, 5 days/week. ATn: RME = 4 weeks, 7 days/week. CT = 2 weeks, 7 days/week.

Incidental Ingestion of Soil

Reasonable Maximum Exposure (RME)

Post-Remediation Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

		Noncarcinogenic Effects				Lifetime Carcinogenic Effects					
	RME	Human			Hazard	Human		Oral			
Chemicals	Conc	Intake Factor	Daily	Oral	Quotient	Intake Factor	Daily	Slope			
of	(CS)	(HIF)	Intake	RfD	(HQ)	(HIF)	Intake	Factor	Risk		
Potential Concern	mg/kg	kg/kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day) ⁻¹	unitless		
Acetone	0.32	2.69E-06	8 62E-07	1.0E+00	9E-07	2 95E-09	9 45E-10				
Benzene	0.015	2 69E-06	4.04E-08	4.0E-03	1E-05	2.95E-09	4.43E-11	5.5E-02	2E-12		
2-Butanone	0.072	2 69E-06	1.94E-07	2.0E+00	1E-07	2.95E-09	2.13E-10				
Ethylbenzene	0.049	2.69E-06	1.32E-07	1 0E-01	1E-06	2.95E-09	1.45E-10				
o-Xylene	0.025	2.69E-06	6 73E-08	2 0E-01	3E-07	2.95E-09	7 38E-11				
Bis(2-ethylhexyl)phthalate	0.45	2.69E-06	1 21E-06	2.0E-02	6E-05	2 95E-09	1 33E-09	1.4E-02	2E-11		
Carbazole	0.47	2.69E-06	1 27E-06			2 95E-09	1 39E-09	2.0E-02	3E-11		
Acenaphthene	0.19	2.69E-06	5 12E-07	6.0E-01	9E-07	2.95E-09	5 61E-10				
Acenaphthylene	0.13	2.69E-06	3 50E-07			2.95E-09	3.84E-10				
Anthracene	0.3	2 69E-06	8.08E-07	3.0E+00	3E-07	2.95E-09	8.86E-10				
Benzo(a)anthracene	0.43	2 69E-06	1.16E-06			2.95E-09	1.27E-09	7 3E-01	9E-10		
Benzo(b)fluoranthene	0 36	2 69E-06	9.70E-07			2.95E-09	1.06E-09	7 3E-01	8E-10		
Benzo(k)fluoranthene	0 39	2.69E-06	1.05E-06		İ	2.95E-09	1 15E-09	7.3E-02	8E-11		
Benzo(g,h,i)perylene	0 48	2.69E-06	1 29E-06			2 95E-09	1 42E-09				
Benzo(a)pyrene	0 52	2.69E-06	1 40E-06			2 95E-09	1 54E-09	7.3E+00	1E-08		
Chrysene	0.67	2.69E-06	1 80E-06		l	2.95E-09	1.98E-09	7 3E-03	1E-11		
Dibenzo(a,h)anthracene	0.13	2.69E-06	3 50E-07			2.95E-09	3.84E-10	7 3E+00	3E-09		
Fluoranthene	1.1	2 69E-06	2.96E-06	4 0E-01	7E-06	2.95E-09	3.25E-09				
Fluorene	0.31	2 69E-06	8.35E-07	4 0E-01	2E-06	2.95E-09	9 15E-10				
Indeno(1,2,3-cd)pyrene	0 35	2 69E-06	9.43E-07		İ	2 95E-09	1 03E-09	7.3E-01	8E-10		
Naphthalene	0 28	2 69E-06	7.54E-07	2 0E-02	4E-05	2 95E-09	8.27E-10				
Phenanthrene	1	2.69E-06	2 69E-06			2.95E-09	2.95E-09				
Pyrene	12	2.69E-06	3 23E-06	3.0E-01	1E-05	295E-09	3.54E-09				
Arsenic	15	2.69E-06	4 04E-05	3.0E-04	1E-01	2.95E-09	4 43E-08	1 5E+00	7E-08		
Beryllium	1.3	2.69E-06	3 50E-06	5.0E-03	7E-04	2.95E-09	3 84E-09				
Chromium*	21	2 69E-06	5.66E-05	2 0E-02	3E-03	2 95E-09	6 20E-08				
Copper	39	2 69E-06	1.05E-04	4 0E-02	3E-03	2 95E-09	1 15E-07				
Lead	41	2 69E-06	1.10E-04			2 95E-09	1 21E-07				
Mercury	0 28	2 69E-06	7.54E-07			2.95E-09	8 27E-10				
Nickel	39	2.69E-06	1.05E-04	2.0E-02	5E-03	2.95E-09	1.15E-07				
Thallium	4.2	2.69E-06	1.13E-05			2.95E-09	1.24E-08				
		Total Pathway	Hazard Index	>	1E-01		Total Pathway	Risk>	8E-08		

INCIDENTAL INGESTION OF SOIL

CS = Concentration of chemical in soil (mg/kg). See Table 11

1 00E-06 CF = 0.000001 kg/mg - Conversion Factor

3 30E+02 $\,$ IR = 330 mg/day - Ingestion Rate of soil for a Utility Worker (USEPA 2002a)

1 00E+00 $\,$ ED = 1 yr - Exposure Duration for a Utility Worker, (assumed value)

 $2.00\,\text{E}\text{+}01$ $\,$ EF = 20 days/yr - Exposure Frequency for a Utility Worker, (assumed value)

7 00E+01 BW = 70 kg - Body Weight for an adult, (USEPA 1991)

2 80E+01 ATn = 28 days - Averaging Time for noncarcinogenic compounds (assumed value)

2 555E+04 ATc = 25,550 days - Averaging Time for carcinogenic compounds (USEPA 1991)

8 00 E-01 $\,$ FI = 0 8 - Fraction Ingested, (Professional judgement)

2 69E-06 HIF = (IR * EF * ED * FI/BW) * CF/(ATn) 2 95E-09 HIF = (IR * EF * ED * FI/BW) * CF/(ATc)

(1) Adjustment Factor applied to Unit Risk to calcul

HIF--NONCARCINOGENIC------

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INIAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

^{*} Chromium concentration is total chromium, RfD is for chromium VI particulates

Dermal Contact with Soil

Reasonable Maximum Exposure (RME)

Post-Remediation Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

			Noncarcinogenic Effects			Lifetime Carcinogenic Effects				
	RME	Absorption	Human	110210425210	Adjusted	Hazard	Human		Adjusted	
Chemicals	Conc	Factor	Intake Factor	Daily	Dermal	Quotient	Intake Factor	Daily	Dermal	
of	(CS)	(ABS)	(HIF)	Intake	RfD	(HQ)	(HIF)	Intake	Slope Factor	Risk
Potential Concern	mg/kg	unitless	kg/kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day)-1	unitless
Acetone*	0 32		-3-3-3			100000000000000000000000000000000000000				
Benzene*	0 015									
2-Butanone*	0 072									
Ethylbenzene*	0 049									
o-Xylene*	0 025									
Bis(2-ethylhexyl)phthalate	0.45	1.00E-01	3.03E-05	1 36E-06	2 0E-02	7E-05	3.32E-08	1.49E-09	1.4E-02	2E-11
Carbazole	0.47	1.00E-01	3.03E-05	1 42E-06			3.32E-08	1.56E-09	2.0E-02	3E-11
Acenaphthene	0.19	1.30E-01	3.03E-05	7.49E-07	6.0E-01	1E-06	3.32E-08	8.20E-10	1	
Acenaphthylene	0.13	1.30E-01	3 03E-05	5.12E-07			3.32E-08	5.61E-10		
Anthracene	0.3	1.30E-01	3 03E-05	1.18E-06	3 0E+00	4E-07	3 32E-08	1 30E-09		
Benzo(a)anthracene	0.43	1 30E-01	3 03E-05	1.69E-06	i		3 32E-08	1 86E-09	7 3E-01	1E-09
Benzo(b)fluoranthene	0.36	1 30E-01	3.03E-05	1.42E-06			3 32E-08	1 55E-09	7.3E-01	1E-09
Benzo(k)fluoranthene	0.39	1 30E-01	3 03E-05	1.54E-06			3 32E-08	1 68E-09	7.3E-02	1E-10
Benzo(g,h,i)perylene	0 48	1 30E-01	3.03E-05	1 89E-06			3.32E-08	2.07E-09		
Benzo(a)pyrene	0.52	1 30E-01	3.03E-05	2 05E-06			3.32E-08	2.25E-09	7 3E+00	2E-08
Chrysene	0 67	1 30E-01	3.03E-05	2 64E-06			3.32E-08	2.89E-09	7 3E-03	2E-11
Dibenzo(a,h)anthracene	0 13	1.30E-01	3.03E-05	5 12E-07			3.32E-08	5.61E-10	7.3E+00	4E-09
Fluoranthene	1.1	1.30E-01	3.03E-05	4 33E-06	4.0E-01	1E-05	3 32E-08	4 75E-09		
Fluorene	0 31	1.30E-01	3 03E-05	1 22E-06	4.0E-01	3E-06	3 32E-08	1 34E-09		
Indeno(1,2,3-cd)pyrene	0.35	1.30E-01	3 03E-05	1.38E-06			3 32E-08	1 51E-09	7.3E-01	1E-09
Naphthalene	0.28	1.30E-01	3 03E-05	1.10E-06	2.0E-02	6E-05	3.32E-08	1 21E-09		
Phenanthrene	1	1 30E-01	3.03E-05	3.94E-06			3 32E-08	4.32E-09		
Pyrene	12	1 30E-01	3 03E-05	4:73E-06	3.0E-01	2E-05	3.32E-08	5.18E-09		
Arsenic	15	3 00E-02	3.03E-05	1.36E-05	2 9E-04	5E-02	3.32E-08	1.49E-08	1.6E+00	2E-08
Beryllium*	13									
Chromium*	21									
Copper*	39									
Lead*	41									
Mercury*	0 28				[
Nickel*	39									
Thallium*	4.2				l					
			Total Pathway	Hazard Index	>	5E-02]	Total Pathway	Risk>	5E-08

DERMAL CONTACT WITH SOIL

CS = Concentration of chemical in soil (mg/kg). See Table 11

ABS = Default value from Rags Part E (USEPA 2004c).

1 00E-06 CF = 0 000001 kg/mg - Conversion Factor

3~30E+03~SA=3.300~sq~cm - Skin Surface Area available for a Utility Worker, (USEPA 2004c)

1.00E+00 ED = 1 yr - Exposure Duration for a Utility Worker, (assumed value)

2 00E+01 EF = 20 days/yr - Exposure Frequency for a Utility Worker (assumed value)

7.00E+01 BW = 70 kg - Body Weight for an adult, (USEPA 1991)

2 80E+01 ATn = 28 days - Averaging Time for noncarcinogenic compounds, (assumed value)

2 555E+04 ATc = 25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991) $9\,00\text{E-}01$ AF = $0\,9\,\text{mg/cm}^2$ - Soil to Skin Adherence Factor for a Utility Worker, (USEPA 2004c)

3 03E-05 HIF = (SA * EF * ED* AF / BW)* CF / (AIn)

3 32E-08 HUF = (SA*EF * ED * AF / BW) * CF / (AIc)

DAJLY INTAKE = (CS * ABS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

HIF--NONCARCINOGENIC----->

HIF--CARCINOGENIC---->

* BTEX compounds and inorganics excluded from dermal risk assessment (USEPA 2004c).

Inhalation of Chemicals in Fugitive Dust

Reasonable Maximum Exposure (RME)

Post-Remediation Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

			Non	carcinogenic Eff	fects	Lifetime Carcinogenic Effects				
	RME	Human				Hazard	Human		Inhalation	
Chemicals	Conc	Intake Factor	Daily	Inhalation	Inhalation	Quotient	Intake Factor	Daily	SF (mg/kg-day)	Inhalation
of	(CS)	(HIF)	Intake	RfC	RfD	(HQ)	(HIF)	Intake	or	Risk
Potential Concern	mg/kg	kg/kg-day	mg/kg-day	mg/m ³	mg/kg-day	unitless	kg/kg-day	mg/kg-day	UR (ug/m ³) ⁻¹	unitless
Acetone	0.32	1 65E-09	5.27E-10				1.80E-12	5.77E-13		
Benzene	0.015	1 65E-09	2.47E-11	3.0E-02	8.6E-03	3E-09	1.80E-12	2.71E-14	2 7E-02	7E-16
2-Butanone	0 072	1 65E-09	1.18E-10	1.0E+00	2 9E-01	4E-10	1 80E-12	1.30E-13		
Ethylbenzene	0 049	1.65E-09	8.06E-11	1.0E+00	2 9E-01	3E-10	1 80E-12	8 84E-14		
o-Xylene	0 025	1.65E-09	4.11E-11	1.0E-01	2 9E-02	1E-09	1 80E-12	4 51E-14		
Bis(2-ethylhexyl)phthalate	0 45	1.65E-09	7 41E-10			ļ	1.80E-12	8 12E-13		
Carbazole	0 47	1.65E-09	7 74E-10				1.80E-12	8.48E-13		
Acenaphthene	0 19	1.65E-09	3 13E-10				1.80E-12	3.43E-13		İ
Acenaphthylene	0 13	1.65E-09	2.14E-10				1 80E-12	2.34E-13		
Anthracene	0.3	1.65E-09	4 94E-10				1 80E-12	5 41E-13		
Benzo(a)anthracene (1, 2)	0.43	5 76E-09	2.48E-09				6 31E-12	2 71E-12	8.8E-05	2E-13
Benzo(b)fluoranthene (1,2)	0.36	5 76E-09	2.07E-09				6 31E-12	2 27E-12	8.8E-05	2E-13
Benzo(k)fluoranthene (1,2)	0.39	5 76E-09	2 25E-09				6 31E-12	2.46E-12	8 8E-06	2E-14
Benzo(g,h,i)perylene	0.48	1 65E-09	7.90E-10				1.80E-12	8.66E-13		
Benzo(a)pyrene (1, 2)	0.52	5 76E-09	3.00E-09				6.31E-12	3.28E-12	8 8E-04	3E-12
Chrysene (1, 2)	0.67	5.76E-09	3.86E-09				6 31E-12	4.23E-12	8 8E-07	4E-15
Dibenzo(a,h)anthracene (1, 2)	0 13	5.76E-09	7 49E-10				6 31E-12	8.21E-13	8.8E-04	7E-13
Fluoranthene	1.1	1 65E-09	1.81E-09				1 80E-12	1 98E-12		
Fluorene	0 31	1.65E-09	5 10E-10				1 80E-12	5 59E-13		
Indeno(1,2,3-cd)pyrene (1, 2)	0 35	5:76E-09	2 02E-09				6 31E-12	2 21E-12	8 8E-05	2E-13
Naphthalene(1)	0 28	5.76E-09	1 61E-09	3 0E-03		5E-07	6.31E-12	1:77E-12		
Phenanthrene	1	1.65E-09	1.65E-09				1.80E-12	1.80E-12		
Pyrene	1.2	1.65E-09	1.97E-09			ļ	1 80E-12	2 16E-12	İ	
Arsenic (1, 2)	15	5 76E-09	8.64E-08				6.31E-12	9 47E-11	4.3E-03	4E-10
Beryllium (1, 2)	13	5 76E-09	7.49E-09	2.0E-05		4E-04	6 31E-12	8 21E-12	2.4E-03	2E-11
Chromium (1, 2, 3)	21	5 76E-09	1.21E-07	1.0E-04		1E-03	6 31E-12	1 33E-10	1 2E-02	2E-09
Copper	39	1 65E-09	6.42E-08			l	1.80E-12	7.03E-11		
Lead	41	1 65E-09	6 75E-08				1.80E-12	7.39E-11		
Mercury	0.28	1 65E-09	4 61E-10	3 0E-04	8.6E-05	5E-06	1.80E-12	5.05E-13		
Nickel	39	1 65E-09	6 42E-08				1.80E-12	7.03E-11	ŀ	
Thallium	4.2	1.65E-09	6.91E-09				1.80E-12	7.58E-12		
	Total Pathway Hazard Index>					2E-03		Total Pathway	Risk>	2E-09

INHALATION DUE TO FUGITIVE DUST

CS = Concentration of chemical in soil (mg/kg). See Table 11

1 24E+08 PEF = 124,000 000 m^3/kg - Particulate Emission Factor. (IAC 2002)

2.00E+01 IR = 20 m^3 /day - Inhalation Rate of a Utility Worker, (USEPA 1997a)

2.00E+01 EF=20 days/yr - Exposure Frequency for a Utility Worker. (assumed value)

1.00E+00 ED = 1 yr - Exposure Duration for a Utility Worker, (assumed value)

7 00E+01 BW = 70 kg - Body Weight for an adult, (USEPA 1991)

2.80E+01 AIn = 28 days - Averaging Time for noncarcinogenic compounds, (assumed value)

2 555E+04 ATc = 25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

1 65E-09 HIF = (IR * EF * ED)/(BW * PEF * AIn)

1 80E-12 HIF = (IR * EF * ED) / (BW * PEF * AIc) DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

* FOR CARCINOGENIC PAHS, NAPHIHALENE, ARSENIC, BERYLLIUM, CADMIUM AND CHROMIUM: 5 76E-09 HIF = (EF * ED) / (PEF * AIn)

HIF-NONCARCINOGENIC---->

HIF--NONCARCINOGENIC----->

HIF--CARCINOGENIC---

HIF-CARCINOGENIC--6 31E-12 HIF = (EF * ED) / (PEF * AIc)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfC)

RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

NOTES:

- (1) Units for HIF are kg/m 3 and units for Daily Intake are mg/m 3
- (2) Unit Risk (UR) (ug/m 3)⁻¹ is used to calculate carcinogenic risk
- (3) Chromium concentration is total chromium, RfC and slope factor are for chromium VI particulates

Inhalation of Chemicals in Vapor Phase

Reasonable Maximum Exposure (RME)

Post-Remediation Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

10-70 Potter Rangoodly 1 Ortoon											
		Volati-		Noncarcir	nogenic Effects			-	Lifetime Car	cinogenic Effects	
	RME	zation	Human					Human		Inhalation	
	Conc	Factor	Intake Factor	Daily	Inhalation	Inhalation	Hazard	Intake Factor	Daily	Slope Factor (SF)	Inhalation
Chemicals	(CS)	(VF')	(HIF)	Intake	RfC	RfD	Quotient	(HIF)	Intake	(mg/kg-day) ⁻¹	Risk
of	` ′	`	m³/kg-day OR	mg/kg-day OR			(HQ)	n ³ /kg-day OF	mg/kg-day OR		
Potential Concern	mg/kg	m³/kg	unitless *	mg/m³*	mg/m³	mg/kg-day	unitless	unitless *	mg/m³ *		unitless
Acetone	0.32	1.16E+02	2.04E-01	5.63E-04				2.24E-04	6.17E-07		
Benzene	0.015	2.06E+01	2.04E-01	1.48E-04	3.0E-02	8.6E-03	2E-02	2.24E-04	1.62E-07	2 7E-02	4E-09
2-Butanone	0.072	1.44E+02	2.04E-01	1.02E-04	1.0E+00	2 9E-01	4E-04	2 24E-04	1 12E-07		
Ethylbenzene	0.049	3.16E+01	2.04E-01	3.16E-04	1 0E+00	2 9E-01	1E-03	2 24E-04	3 46E-07		
o-Xylene	0.025	3 59E+01	2 04E-01	1 42E-04	1 0E-01	2.9E-02	5E-03	2.24E-04	1 56E-07		
Naphthalene*	0.28	2.88E+02	7.14E-01	6.93E-04	3.0E-03		2E-01	7.83E-04	7.60E-07		
				Total Pathway Ha	zard Index	>	3E-01		Total Pathway R	isk>	4E-09

INHALATION OF CHEMICALS IN VAPOR PHASE

CS = Concentration of chemical in soil (mg/kg). See Table 11

 $VF^i = Volatization$ factor adjusted for agitaion. See Table 15

2 00E+01 IR = 20 m³/day - Inhalation Rate of a Utility Worker, (USEPA 1997a)

2 00E+01 EF = 20 days/yr - Exposure Frequency for a Utility Worker, (assumed value)

1 00E+00 ED = 1 year - Exposure Duration for a Utility Worker, (assumed value)

7 00E+01 BW = 70 kg - Body Weight for an adult, (USEPA 1991)

2.80E+01 AIn = 28 days - Averaging Time for noncarcinogenic compounds, (assumed value)

2 555E+04 ATc = 25,550 days- Averaging Time for carcinogenic compounds, (USEPA 1991)

2 04E-01 HIF = (IR * EF * ED) / (BW * ATn)

2 24E-04 HIF = (IR * EF * ED) / (BW * ATc)

DAILY INTAKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

* FOR NAPHTHALENE:

HIF--NONCARCINOGENIC---->

HIF--CARCINOGENIC-----

HIF--NONCARCINOGENIC----->
HIF--CARCINOGENIC----->

7 14E-01 HIF = (EF * ED) / (A In)

7 83E-04 HIF = (EF * ED) / (A Ic)

DAILY INTAKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (INTAKE / RfC)

RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

Incidental Ingestion of Soil

Central Tendency (CT)

Post-Remediation Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

		Noncarcinogenic Effects				Lifetime Carcinogenic Effects					
	CI	Human			Hazard	Human		Oral			
Chemicals	Conc	Intake Factor	Daily	Oral	Quotient	Intake Factor	Daily	Slope			
of	(CS)	(HIF)	Intake	RfD	(HQ)	(HIF)	Intake	Factor	Risk		
Potential Concern	mg/kg	kg/kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day) ⁻¹	unitless		
Acetone	0 32	5 10E-07	1.63E-07	1.0E+00	2E-07	2 80E-10	8.95E-11				
Benzene	0.015	5.10E-07	7.65E-09	4.0E-03	2E-06	2 80E-10	4 19E-12	5.5E-02	2E-13		
2-Butanone	0.072	5.10E-07	3.67E-08	2 0E+00	2E-08	2.80E-10	2 01E-11				
Ethylbenzene	0.049	5.10E-07	2.50E-08	1.0E-01	3E-07	2.80E-10	1 37E-11				
o-Xylene	0.025	5.10E-07	1.28E-08	2.0E-01	6E-08	2.80E-10	6 99E-12				
Bis(2-ethylhexyl)phthalate	0.45	5.10E-07	2 30E-07	2 0E-02	1E-05	2.80E-10	1 26E-10	1 4E-02	2E-12		
Carbazole	0.47	5.10E-07	2 40E-07			2.80E-10	1.31E-10	2.0E-02	3E-12		
Acenaphthene	0.19	5.10E-07	9 69E-08	6 0E-01	2E-07	2.80E-10	5.31E-11				
Acenaphthylene	0.13	5 10E-07	6 63E-08			2 80E-10	3.63E-11				
Anthracene	03	5 10E-07	1 53E-07	3.0E+00	5E-08	2 80E-10	8.39E-11	ŀ			
Benzo(a)anthracene	0.43	5 10E-07	2 19E-07			2.80E-10	1 20E-10	7 3E-01	9E-11		
Benzo(b)fluoranthene	0.36	5 10E-07	1 84E-07			2.80E-10	1 01E-10	7 3E-01	7E-11		
Benzo(k)fluoranthene	0 39	5.10E-07	1.99E-07			2.80E-10	1 09E-10	7 3E-02	8E-12		
Benzo(g,h,i)perylene	0 48	5.10E-07	2.45E-07			2.80E-10	1 34E-10				
Benzo(a)pyrene	0 52	5.10E-07	2.65E-07			2.80E-10	1_45E-10	7 3E+00	1E-09		
Chrysene	0 67	5.10E-07	3.42E-07			2.80E-10	1.87E-10	7.3E-03	1E-12		
Dibenzo(a,h)anthracene	0 13	5.10E-07	6.63E-08			2 80E-10	3.63E-11	7 3E+00	3E-10		
Fluoranthene	11	5.10E-07	5.61E-07	4 0E-01	1E-06	2 80E-10	3.08E-10				
Fluorene	0 31	5.10E-07	1 58E-07	4 0E-01	4E-07	2 80E-10	8.67E-11	}			
Indeno(1,2,3-cd)pyrene	0 35	5.10E-07	1 79E-07			2 80E-10	9 78E-11	7 3E-01	7E-11		
Naphthalene	0 28	5 10E-07	1 43E-07	2.0E-02	7E-06	2 80E-10	7 83E-11				
Phenanthrene	1	5 10E-07	5 10E-07			2.80E-10	2.80E-10				
Pyrene	12	5 10E-07	6.12E-07	3.0E-01	2E-06	2.80E-10	3.35E-10				
Arsenic	15	5.10E-07	7.65E-06	3.0E-04	3E-02	2.80E-10	4.19E-09	1 5E+00	6E-09		
Beryllium	1.3	5.10E-07	6.63E-07	5.0E-03	1E-04	2 80E-10	3.63E-10	1			
Chromium*	21	5_10E-07	1.07E-05	2.0E-02	5E-04	2 80E-10	5.87E-09				
Copper	39	5.10E-07	1.99E-05	4 0E-02	5E-04	2 80E-10	1 09E-08				
Lead	41	5.10E-07	2.09E-05			2 80E-10	1 15E-08				
Mercury	0 28	5.10E-07	1.43E-07			2 80E-10	7.83E-11				
Nickel	39	5.10E-07	1 99E-05	2.0E-02	1E-03	2 80E-10	1.09E-08				
Thallium	4.2	5.10E-07	2.14E-06			2.80E-10	1.17E-09				
		Total Pathway	Hazard Index	ex> 3E-02 Total Pathway Risk>			8E-09				

INCIDENTAL INGESTION OF SOIL

CS = Concentration of chemical in soil (mg/kg) See Table 11

1 00E-06 CF = 0 000001 kg/mg - Conversion Factor

1 00E+02 IR = 100 mg/day - Ingestion Rate of soil for a Utility Worker, (USEPA 2002a)

1 00E+00 ED = 1 yr - Exposure Duration for a Utility Worker, (assumed value)

ł 00E+01 EF = 10 days/yr - Exposure Frequency for a Utility Worker (assumed value)

7 00E+01 BW = 70 kg - Body Weight for an adult, (USEPA 1991)

 $1.40E+01\quad A\,In=14\,days - Averaging\,\, Time\,\, for\,\, noncarcinogenic\,\, compounds,\,\, (assumed\,\, value)$

2.555E+04 ATc = 25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

5.00E-01 FI = 0.5 - Fraction Ingested, (Professional judgement)

 $5\ 10\text{E-}07\ \text{HIF} = (\text{IR} * \text{EF} * \text{ED} * \text{FI} / \text{BW}) * \text{CF} / (\text{ATn})$

HIF--NONCARCINOGENIC----

HIF--CARCINOGENIC--

2.80E-10 HIF = (IR * EF * ED * FI / BW) * CF / (A Ic)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

^{*} Chromium concentration is total chromium, RfD is for chromium VI particulates

Dermal Contact with Soil

Central Tendency (CT)

Post-Remediation Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

	i i		Noncarcinogenic Effects			Lifetime Carcinogenic Effects				
	СТ	Absorption	Human		Adjusted	Hazard	Human		Adjusted	
Chemicals	Conc	Factor	Intake Factor	Daily	Dermal	Quotient	Intake Factor	Daily	Dermal	
of	(CS)	(ABS)	(HIF)	Intake	RfD	(HQ)	(HIF)	Intake	Slope Factor	Risk
Potential Concern	mg/kg	unitless	kg/kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day) ⁻¹	unitless
Acetone*	0.32	umireos	1 19 19 119		-8-2-7					
Benzene*	0.015									
2-Butanone*	0.072									
Ethylbenzene*	0 049	1								
o-Xylene*	0 025									
Bis(2-ethylhexyl)phthalate	0 45	1.00E-01	6.73E-06	3 03E-07	2 0E-02	2E-05	3.69E-09	1.66E-10	1 4E-02	2E-12
Carbazole	0 47	1 00E-01	6.73E-06	3 17E-07			3.69E-09	1.73E-10	2 0E-02	3E-12
Acenaphthene	0 19	1.30E-01	6 73E-06	1 66E-07	6 0E-01	3E-07	3.69E-09	9.11E-11		
Acenaphthylene	0.13	1 30E-01	6 73E-06	1 14E-07			3.69E-09	6.24E-11		
Anthracene	0.3	1 30E-01	6 73E-06	2 63E-07	3.0E+00	9E-08	3 69E-09	1 44E-10		
Benzo(a)anthracene	0.43	1 30E-01	6 73E-06	3 76E-07			3 69E-09	2 06E-10	7.3E-01	2E-10
Benzo(b)fluoranthene	0 36	1 30E-01	6 73E-06	3 15E-07			3 69E-09	1 73E-10	7 3E-01	1E-10
Benzo(k)fluoranthene	0.39	1 30E-01	6 73E-06	3 41E-07			3 69E-09	1 87E-10	7 3E-02	1E-11
Benzo(g,h,i)perylene	0.48	1 30E-01	6.73E-06	4 20E-07			3.69E-09	2 30E-10		
Benzo(a)pyrene	0.52	1.30E-01	6.73E-06	4 55E-07			3 69E-09	2.49E-10	7.3E+00	2E-09
Chrysene	0.67	1.30E-01	6.73E-06	5.87E-07			3.69E-09	3.21E-10	7.3E-03	2E-12
Dibenzo(a,h)anthracene	0.13	1 30E-01	6.73E-06	1.14E-07			3.69E-09	6.24E-11	7 3E+00	5E-10
Fluoranthene	11	1.30E-01	6.73E-06	9.63E-07	4 0E-01	2E-06	3.69E-09	5.28E-10		
Fluorene	0.31	1.30E-01	6.73E-06	2.71E-07	4 0E-01	7E-07	3.69E-09	1 49E-10		
Indeno(1,2,3-cd)pyrene	0 35	1.30E-01	6:73E-06	3.06E-07			3.69E-09	1 68E-10	7 3E-01	1E-10
Naphthalene	0 28	1.30E-01	6.73E-06	2 45E-07	2.0E-02	1E-05	3 69E-09	1 34E-10		
Phenanthrene	1	1.30E-01	6 73E-06	8 76E-07			3 69E-09	4 80E-10		
Pyrene	12	1 30E-01	6 73E-06	1 05E-06	3.0E-01	4E-06	3 69E-09	5:76E-10		
Arsenic	15	3.00E-02	6 73E-06	3 03E-06	2.9E-04	1E-02	3 69E-09	1.66E-09	1 6E+00	3E-09
Beryllium*	1.3									
Chromium*	21									
Copper*	39									
Lead*	41									
Mercury*	0 28				1				l	
Nickel*	39				1					
Thallium*	4.2				l				l	
			Total Pathway	Hazard Index	>	1E-02		Total Pathway	Risk>	5E-09

DERMAL CONTACT WITH SOIL

CS = Concentration of chemical in soil (mg/kg). See Table 11.

ABS = Default value from Rags Part E (USEPA 2004c).

1 00E-06 CF = 0 000001 kg/mg - Conversion Factor

 $3\ 30E+03\ SA=3,300\ sq\ cm$ - Skin Surface Area available for a Utility Worker, (USEPA 2004c)

1 00E+00 ED = 1 yr - Exposure Duration for a Utility Worker, (assumed value)

1.00E+01 EF = 10 days/yr - Exposure Frequency for a Utility Worker, (assumed value)

7.00E+01 BW = 70 kg - Body Weight for an adult, (USEPA 1991)

1 40E+01 AIn = 14 days - Averaging Time for noncarcinogenic compounds, (assumed value)

 $2.555E+04\quad ATc=25,\!550~days-Averaging~Time~for~carcinogenic~compounds, (USEPA~1991)$

 $2\,00E\text{-}01\quad\text{AF}=0\,2\,\text{mg/cm}^2\text{-}\text{Soil to Skin Adherence Factor for a Utility Worker, (USEPA 2004c)}$

6 73E-06 HIF = (SA * EF * ED* AF / BW)* CF / (AIn) 3 69E-09 HIF = (SA* EF * ED * AF / BW)* CF / (AIc)

DAILY INTAKE = (CS * ABS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

NOTE:

HIF--NONCARCINOGENIC----->

HIF--CARCINOGENIC----->

*BIEX compounds and inorganics excluded from dermal risk assessment (USEPA 2004c).

Inhalation of Chemicals in Fugitive Dust

Central Tendency (CT)

Post-Remediation Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

			Non	carcinogenic Ef	fects			Lifetime Car	cinogenic Effects		
	CI	Human				Hazard	Human		Inhalation		
Chemicals	Conc	Intake Factor	Daily	Inhalation	Inhalation	Quotient	Intake Factor	Daily	SF (mg/kg-day) ⁻¹	Inhalation	
of	(CS)	(HIF)	Intake	RfC	RfD	(HQ)	(HIF)	Intake	or	Risk	
Potential Concern	mg/kg	kg/kg-day	mg/kg-day	mg/m³	mg/kg-day	unitless	kg/kg-day	mg/kg-day	UR (ug/m ³) ⁻¹	unitless	
Acetone	0 32	9 87E-10	3.16E-10				5 41E-13	1.73E-13			
Benzene	0 015	9.87E-10	1.48E-11	3.0E-02	8.6E-03	2E-09	5.41E-13	8 12E-15	2 7E-02	2E-16	
2-Butanone	0 072	9 87E-10	7.11E-11	1.0E+00	2.9E-01	2E-10	5.41E-13	3 90E-14			
Ethylbenzene	0 049	9.87E-10	4.84E-11	1.0E+00	2.9E-01	2E-10	5.41E-13	2 65E-14			
o-Xylene	0.025	9.87E-10	2.47E-11	1.0E-01	2.9E-02	9E-10	5.41E-13	1.35E-14			
Bis(2-ethylhexyl)phthalate	0.45	9.87E-10	4.44E-10				5.41E-13	2.43E-13			
Carbazole	0.47	9.87E-10	4.64E-10				5.41E-13	2.54E-13			
Acenaphthene	0.19	9.87E-10	1 88E-10				5 41E-13	1.03E-13			
Acenaphthylene	0.13	9.87E-10	1 28E-10				5 41E-13	7 03E-14			
Anthracene	03	9.87E-10	2 96E-10				5.41E-13	1 62E-13			
Benzo(a)anthracene (1, 2)	0.43	5 76E-09	2 48E-09				3.16E-12	1 36E-12	8.8E-05	1E-13	
Benzo(b)fluoranthene (1,2)	0.36	5 76E-09	2 07E-09				3.16E-12	1.14E-12	8.8E-05	1E-13	
Benzo(k)fluoranthene (1,2)	0 39	5 76E-09	2 25E-09				3.16E-12	1.23E-12	8.8E-06	1E-14	
Benzo(g,h,i)perylene	0 48	9 87E-10	4.74E-10				5.41E-13	2.60E-13			
Benzo(a)pyrene (1, 2)	0 52	5 76E-09	3.00E-09				3 16E-12	1 64E-12	8 8E-04	1E-12	
Chrysene (1, 2)	0 67	5:76E-09	3.86E-09				3 16E-12	2 11E-12	8 8E-07	2E-15	
Dibenzo(a,h)anthracene (1, 2)	0 13	5 76E-09	7.49E-10				3 16E-12	4 10E-13	8.8E-04	4E-13	
Fluoranthene	1.1	9.87E-10	1.09E-09				5 41E-13	5 95E-13			
Fluorene	0 31	9.87E-10	3.06E-10				5.41E-13	1.68E-13			
Indeno(1,2,3-cd)pyrene (1, 2)	0 35	5.76E-09	2.02E-09				3.16E-12	1.10E-12	8 8E-05	1E-13	
Naphthalene(1)	0 28	5.76E-09	1 61E-09	3 0E-03		5E-07	3.16E-12	8.84E-13			
Phenanthrene	1	9.87E-10	9 87E-10				5 41E-13	5.41E-13			
Pyrene	12	9.87E-10	1 18E-09		:		5 41E-13	6 49E-13			
Arsenic (1, 2)	15	5 76E-09	8 64E-08				3 16E-12	4 73E-11	4.3E-03	2E-10	
Beryllium (1, 2)	13	5 76E-09	7 49E-09	2.0E-05		4E-04	3.16E-12	4 10E-12	2.4E-03	1E-11	
Chromium (1, 2, 3)	21	5 76E-09	1.21E-07	1.0E-04		1E-03	3.16E-12	6.63E-11	1 2E-02	8E-10	
Copper	39	9 87E-10	3.85E-08				5.41E-13	2.11E-11			
Lead	41	9.87E-10	4.05E-08				5.41E-13	2.22E-11			
Mercury	0 28	9.87E-10	2.76E-10	3 0E-04	8.6E-05	3E-06	5.41E-13	1.52E-13			
Nickel	39	9.87E-10	3.85E-08				5 41E-13	2 11E-11			
Thallium	4.2	9.87E-10	4.15E-09				5.41E-13	2,27E-12		1E-09	
3,000,000			Total Pathway	Hazard Index	>	2E-03	-03 Total Pathway Risk>				

INHALATION DUE TO FUGITIVE DUST

CS = Concentration of chemical in soil (mg/kg) See Table 11

1.24E+08 PEF = 124,000,000 m³/kg - Particulate Emission Factor, (IAC 2002)

 $1\ 20E+01$ $\,$ IR = $12\ m^3/day$ - Inhalation Rate of a Utility Worker, (USEPA 1997a)

1 00E+01 EF = 10 days/yr - Exposure Frequency for a Utility Worker, (assumed value) 1 00E+00 ED = 1 yr - Exposure Duration for a Utility Worker, (assumed value)

7.00E+01 BW = 70 kg - Body Weight for an adult. (USEPA 1991)

1 40E+01 AIn = 14 days - Averaging Time for noncarcinogenic compounds. (assumed value)

2 555E+04 ATc = 25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

987E-10 HIF = (IR * EF * ED) / (BW * PEF * AIn)

5 41E-13 HIF = (IR * EF * ED) / (BW * PEF * ATc)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

* FOR CARCINOGENIC PAHS, NAPHIHALENE, ARSENIC BERYLLIUM, CADMIUM AND CHROMIUM:

HIF--NONCARCINOGENIC---->

HIF--CARCINOGENIC---

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfC)

RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

NOTES:

- (1) Units for HIF are kg/m 3 and units for Daily Intake are mg/m 3
- (2) Unit Risk (UR) (ug/m ³)⁻¹ is used to calculate carcinogenic risk
- (3) Chromium concentration is total chromium, RfC and slope factor are for chromium VI particulates

Inhalation of Chemicals in Vapor Phase

Central Tendency (CT)

Post-Remediation Utility Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

1040 (total italignment) 1 oraco											
		Volati-		Noncarcin	ogenic Effects	1			Lifetime Care	cinogenic Effects	
	CI	zation	Human					Human		Inhalation	
	Conc	Factor	Intake Factor	Daily	Inhalation	Inhalation	Hazard	Intake Factor	Daily	Slope Factor (SF)	Inhalation
Chemicals	(CS)	(VF)	(HIF)	Intake	RfC	RfD	Quotient	(HIF)	Intake	(mg/kg-day) ⁻¹	Risk
of	(4-)	```	m ³ /kg-day OR	mg/kg-day OR			(HQ)	n ³ /kg-day OF	mg/kg-day OR		
Potential Concern	mg/kg	m³/kg	unitless *	mg/m³*	mg/m³	mg/kg-day	unitless	unitless *	mg/m³ *		unitless
Acetone	0 32	8.20E+01	1.22E-01	4 78E-04				6.71E-05	2.62E-07		
Benzene	0.015	1.46E+01	1.22E-01	1 26E-04	3 0E-02	8 6E-03	1E-02	6 71E-05	6.89E-08	2.7E-02	2E-09
2-Butanone	0.072	1.02E+02	1 22E-01	8 67E-05	1.0E+00	2.9E-01	3E-04	6.71E-05	4 75E-08		
Ethylbenzene	0 049	2 24E+01	1 22E-01	2.68E-04	1.0E+00	2.9E-01	9E-04	6.71E-05	1 47E-07		
o-Xylene	0 025	2 54E+01	1 22E-01	1 21E-04	1.0E-01	2.9E-02	4E-03	6.71E-05	6.60E-08		
Naphthalene *	0.28	2.04E+02	7.14E-01	9.81E-04	3.0E-03		3E-01	3.91E-04	5.37E-07		
Total Pathway Hazard Index>						3E-01		Total Pathway R	isk>	2E-09	

INHALATION OF CHEMICALS IN VAPOR PHASE

CS = Concentration of chemical in soil (mg/kg) See Table 11.

VF' = Volatization factor adjusted for agitaion See Table 15

1 20E+01 IR = 12 m³/day - Inhalation Rate of a Utility Worker, (USEPA 1997a)

1 00E+01 EF = 10 days/yr - Exposure Frequency for a Utility Worker, (assumed value)

1.00E+00 ED = 1 year - Exposure Duration for a Utility Worker, (assumed value)

7.00E+01 BW = 70 kg - Body Weight for an adult, (USEPA 1991)

1 40E+01 ATn = 14 days - Averaging Time for noncarcinogenic compounds, (assumed value)

2 555E+04 ATc = 25,550 days-Averaging Time for carcinogenic compounds, (USEPA 1991)

1 22E-01 HIF = (IR * EF * ED) / (BW * ATn)

6.71E-05 HIF = (IR * EF * ED) / (BW * AIc)

DAILY INTAKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

HIF--NONCARCINOGENIC----->

* FOR NAPHTHALENE:

HIF--NONCARCINOGENIC---->

HIF-CARCINOGENIC----

7 14E-01 HIF = (EF * ED) / (ATn)

3 91E-04 HIF = (EF * ED) / (AIc)

DAILY INTAKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (INTAKE / RfC)

RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

Values Used For Daily Intake Calculations

Post-Remediation Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Subsurface Soil
Exposure Point: Subsurface Soil
Receptor Population: Construction Worker

Receptor Age: Adult

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	CT Value	CT Rationale/ Reference	Intake Equation
Ingestion	CS	Chemical Concentration in Soil	mg/kg	See Table 12	See Table 12	See Table 12	See Table 12	DI (mg/kg-day) =
	IR.	Ingestion Rate of Soil	mg/day	330	2002a	100	USEPA 1997a	CS x IR x EF x ED x FI x CF x 1/BW x 1/AT
	FI	Fraction Ingested		0.8	(1)	0.5	(1)	†
	EF	Exposure Frequency	days/year	250	(2)	125	(2)	
	ED	Exposure Duration	years	1	(3)	1	(3)	
	CF	Conversion Factor (mg to kg)	kg/mg	1E-06		1E-06		
	BW	Body Weight	kg	70	USEPA 1991	70	USEPA 1991	
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	350	USEPA 1991	175	USEPA 1991	
Dermal	CS	Chemical Concentration in Soil	mg/kg	See Table 12	See Table 12	See Table 12	See Table 12	DI (mg/kg-day) =
	CF	Conversion Factor (mg to kg)	kg/mg	1E-06		1E-06		CS x SA x CF x AF x ABS x EF x ED x 1/BW x 1/AT
	AF	Soil to Skin Adherence Factor	mg/cm2	0.3	USEPA 2004c	0.1	USEPA 2004c	
	ABS	Absorption Factor		Chemical Specific See Table 47	USEPA 2004c	Chemical Specific See Table 121	USEPA 2004c	
	SA	Skin Surface Area Available for Contact	cm2	3,300	USEPA 2004c	3,300	USEPA 2004c	
	EF	Exposure Frequency	days/years	250	(2)	125	(2)	
	ED	Exposure Duration	years	1	(3)	1	(3)	
	BW	Body Weight	kg	70	USEPA 1991	70	USEPA 1991	
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	350	USEPA 1991	175	USEPA 1991	

Notes:

- (1) Value assumed to evaluate exposure based on sampling data and expected population activity patterns.
- (2) Values assumed to represent an average redevelopment construction project. Work to be completed within 1 year. EF: RME = 12 months, 5 days/week. CT = 6 months, 5 days/week. ATn: RME = 12 months, 7 days/week. CT = 6 months, 7 days/week.
- (3) Site-specific Work to be completed within 1 year.

SOURCES:

USEPA 1991: Risk Assessment Guidance for Superfund. Vol.1: Human Health Evaluation Manual - Supptemental Guidance, Standard Default Exposure Factors. Internm Final. OSWER Directive 9285.6-03, March 15.

USEPA 1997a: Exposure Factors Handbook: Volume I - General Factors, August.

USEPA 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER Directive 9355.4-24, December.

USEPA 2004c: Risk Assessment Guidance for Superfund. Vol.1: Human Health Evaluation Manual Part E - Supplemental Guidance for Dermal Risk Assessment, Final. OSWER Directive 9285.7-02EP, July.

Table 45 (Continued)

Values Used For Daily Intake Calculations

Post-Remediation Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

Scenario Timeframe: Future

Medium: Soil

Exposure Medium: Subsurface Soil
Exposure Point: Subsurface Soil
Receptor Population: Construction Worker

Receptor Age: Adult

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	CT Value	CT Rationale/ Reference	Intake Equation
Inhalation of	CS	COPC Concentration in Soil	mg/kg	See Table 12	See Table 12	See Table 12	See Table 12	Chronic Daily Intake (CDI) (mg/kg-day) =
Fugitive Dust	IR	Inhalation Rate	m3/day	20	(1)	12	(1)	CS x IR x EF x ED/BW x AT x PEF
	PEF	Particulate Emission Factor	m3/kg	1.24E+08	IAC 2002	1.24E+08	IAC 2002	
	EF	Exposure Frequency	days/year	250	(2)	125	(2)	
	ED	Exposure Duration	years	1	(3)	i	(3)	
	BW	Body Weight	kg	70	USEPA 1991	70	USEPA 1991	
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	350	USEPA 1991	175	USEPA 1991	
Inhalation of	CS	COPC Concentration in Soil	mg/m ³	See Table 12	See Table 12	See Table 12	See Table 12	DI (mg/kg-day) =
Vapor Phase	VF'	Volatilazion Factor	m³/kg	See Table 16	See Tables 15-16	See Table 16	See Tables 15-16	CS x IR x EF x ED/(BW x AT x VF')
COPCS	IR	Inhalation Rate	m³/day	20	(1)	12	(1)	
	EF	Exposure Frequency	days/year	250	(2)	125	(2)	
	ED	Exposure Duration	years	1	(3)	1	(3)	DI for use with RfC (mg/m ³) =
	вw	Body Weight	kg	70	USEPA 1991	70	USEPA 1991	CS x EF x ED/(AT x VF')
	ATc	Averaging Time (Cancer)	days	25,550	USEPA 1991	25,550	USEPA 1991	
	ATn	Averaging Time (Non-Cancer)	days	350	(2)	175	(2)	

Notes:

SOURCES:

Illinois Administrative Code (IAC), 2002: Title 35: Environmental Protection, Subtitle G, Chapter I, Pollution Control Board, Subchapter f, Part 742: Tiered Approach to Corrective Action Objectives (TACO), Appendix C, Table B, February.

USEPA 1991: Risk Assessment Guidance for Superfund. Vol.1: Human Health Evaluation Manual - Supptemental Guidance, Standard Default Exposure Factors. Internm Final. OSWER Directive 9285.6-03, March 15.

USEPA 1997a: Exposure Factors Handbook: Volume 1 - General Factors, August.

⁽¹⁾ Assumes 8 hours a day of heavy activity (2.5 m 3/hr) for the RME value and 8 hours of moderate activity (1.5 m 3/hr) for the CT value (USEPA 1997a).

⁽²⁾ Values assumed to represent an average redevelopment construction project. Work to be completed within 1 year. EF: RME = 12 months, 5 days/week. CT = 6 months, 5 days/week. ATn: RME = 12 months, 7 days/week.

⁽³⁾ Site specific - Work to be completed within one year,

Incidental Ingestion of Soil

Reasonable Maximum Exposure (RME)

Post-Remediation Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

				ogenic Effects			Lifetime Ca	arcinogenic Effec	ts
	RME	Human			Hazard	Human		Oral	
Chemicals	Conc	Intake Factor	Daily	Oral	Quotient	Intake Factor	Daily	Slope	
of	(CS)	(HIF)	Intake	RfD	(HQ)	(HIF)	Intake	Factor	Risk
Potential Concern	mg/kg	kg/kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day) ⁻¹	unitless
Acetone	0.32	2.69E-06	8.62E-07	1.0E+00	9E-07	3.69E-08	1.18E-08	1.02.027	
Benzene	0 015	2.69E-06	4.04E-08	4.0E-03	1E-05	3.69E-08	5.54E-10	5.5E-02	3E-11
2-Butanone	0 072	2.69E-06	1.94E-07	2.0E+00	1E-07	3.69E-08	2.66E-09		
o-Xylene	0 025	2.69E-06	6 73E-08	2.0E-01	3E-07	3 69E-08	9.23E-10		
Acenaphthene	0 19	2.69E-06	5 12E-07	6.0E-01	9E-07	3.69E-08	7.01E-09		
Acenaphthylene	0.13	2.69E-06	3 50E-07			3 69E-08	4.80E-09		
Anthracene	0.3	2.69E-06	8 08E-07	3.0E+00	3E-07	3.69E-08	1.11E-08		
Benzo(a)anthracene	0.43	2.69E-06	1.16E-06			3.69E-08	1 59E-08	7.3E-01	1E-08
Benzo(b)fluoranthene	0.36	2.69E-06	9.70E-07			3.69E-08	1 33E-08	7.3E-01	1E-08
Benzo(k)fluoranthene	0.39	2.69E-06	1.05E-06			3.69E-08	1.44E-08	7.3E-02	1E-09
Benzo(g,h,i)perylene	0.48	2.69E-06	1 29E-06			3.69E-08	177E-08		
Benzo(a)pyrene	0 52	2.69E-06	1.40E-06			3.69E-08	1.92E-08	7.3E+00	1E-07
Chrysene	0.67	2.69E-06	1.80E-06			3.69E-08	2.47E-08	7.3E-03	2E-10
Dibenzo(a,h)anthracene	0.13	2.69E-06	3.50E-07			3.69E-08	4.80E-09	7.3E+00	4E-08
Fluoranthene	1.1	2.69E-06	2.96E-06	4.0E-01	7E-06	3.69E-08	4.06E-08		
Fluorene	0 31	2.69E-06	8.35E-07	4.0E-01	2E-06	3 69E-08	1.14E-08		
Indeno(1,2,3-cd)pyrene	0 35	2.69E-06	9.43E-07			3 69E-08	1.29E-08	7.3E-01	9E-09
Naphthalene	1.1	2.69E-06	2.96E-06	2.0E-02	1E-04	3 69E-08	4.06E-08		
Phenanthrene	1	2.69E-06	2.69E-06			3.69E-08	3.69E-08		
Pyrene	1.2	2.69E-06	3.23E-06	3.0E-01	1E-05	3.69E-08	4.43E-08		
Arsenic	17	2.69E-06	4.58E-05	3.0E-04	2E-01	3.69E-08	6.27E-07	1.5E+00	9E-07
Beryllium	1.3	2.69E-06	3.50E-06	5.0E-03	7E-04	3.69E-08	4.80E-08		
Cadmium	0.66	2.69E-06	1 78E-06	1.0E-03	2E-03	3.69E-08	2.44E-08		
Chromium*	21	2.69E-06	5.66E-05	2.0E-02	3E-03	3.69E-08	7.75E-07		
Copper	55	2.69E-06	1.48E-04	4.0E-02	4E-03	3.69E-08	2.03E-06		
Lead	41	2.69E-06	1 10E-04			3.69E-08	1.51E-06		
Mercury	0.28	2 69E-06	7 54E-07			3 69E-08	1 03E-08		
Nickel	39	2.69E-06	1 05E-04	2.0E-02	5E-03	3 69E-08	1.44E-06		
Thallium	4.2	2.69E-06	1.13E-05			3.69E-08	1.55E-07		
		Total Pathway	Hazard Index	>	2E-01		Total Pathway	Risk>	1E-06

INCIDENTAL INGESTION OF SOIL

CS = Concentration of chemical in soil (mg/kg) See Table 12

1 00E-06 CF = 0 000001 kg/mg - Conversion Factor

 $3\ 30E+02\ \ IR=330\ mg/day$ - Ingestion Rate of soil for a Construction Worker, (USEPA 2002a)

1.00E+00 ED = 1 yr - Exposure Duration for a Construction Worker, (assumed value)

2.50E+02 EF = 250 days/yr - Exposure Frequency for a Construction Worker, (assumed value)

7.00E+01 BW = 70 kg - Body Weight for an adult, (USEPA 1991)

3.50E+02 AIn = 350 days - Averaging I ime for noncarcinogenic compounds, (assumed value)

2 555E+04 AIc=25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

8.00E-01 FI = 0.8 - Fraction Ingested, (Professional judgement)

2.69E-06 HIF = (IR * EF * ED * FI / BW) * CF / (AIn)

3.69E-08 HIF = (IR * EF * ED * FI / BW) * CF / (AIc)

DAILY INTAKE = (CS * HIF)

HIF--NONCARCINOGENIC-----

HIF--CARCINOGENIC-----

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

^{*} Chromium concentration is total chromium, RfD is for chromium VI particulates

Dermal Contact with Soil

Reasonable Maximum Exposure (RME)

Post-Remediation Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

				Noncarcino	genic Effects			Lifetime Carci	nogenic Effects	
	RME	Absorption	Human		Adjusted	Hazard	Human		Adjusted	
Chemicals	Conc	Factor	Intake Factor	Daily	Dermal	Quotient	Intake Factor	Daily	Dermal	
of	(CS)	(ABS)	(HIF)	Intake	RfD	(HQ)	(HIF)	Intake	Slope Factor	Risk
Potential Concern	mg/kg	unitless	kg/kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day) ⁻¹	unitless
Acetone*	0.32			7 10 202.2	133440					
Benzene*	0.015									
2-Butanone*	0.072	•								
o-Xylene*	0.025	ŀ								
Acenaphthene	0.19	1 30E-01	1.01E-05	2.50E-07	6.0E-01	4E-07	1.38E-07	3.42E-09		
Acenaphthylene	0.13	1 30E-01	1 01E-05	1.71E-07			1.38E-07	2.34E-09		
Anthracene	0.3	1_30E-01	1 01E-05	3.94E-07	3.0E+00	1E-07	1.38E-07	5.40E-09		
Benzo(a)anthracene	0.43	1.30E-01	1.01E-05	5.65E-07			1.38E-07	7.74E-09	7.3E-01	6E-09
Benzo(b)fluoranthene	0.36	1.30E-01	1.01E-05	4.73E-07			1.38E-07	6.48E-09	7.3E-01	5E-09
Benzo(k)fluoranthene	0 39	1.30E-01	1.01E-05	5.12E-07			1.38E-07	7 02E-09	7.3E-02	5E-10
Benzo(g,h,i)perylene	0.48	1.30E-01	1.01E-05	6.30E-07			1 38E-07	8.64E-09		
Benzo(a)pyrene	0.52	1.30E-01	1.01E-05	6.83E-07			1 38E-07	9_35E-09	7.3E+00	7E-08
Chrysene	0.67	1.30E-01	1.01E-05	8.80E-07			1 38E-07	1.21E-08	7 3E-03	9E-11
Dibenzo(a,h)anthracene	0.13	1 30E-01	1.01E-05	1.71E-07			1.38E-07	2.34E-09	7.3E+00	2E-08
Fluoranthene	1.1	1 30E-01	1.01E-05	1.44E-06	4 0E-01	4E-06	1.38E-07	1.98E-08	İ	
Fluorene	0.31	1 30E-01	1 01E-05	4.07E-07	4.0E-01	1E-06	1.38E-07	5.58E-09		
Indeno(1,2,3-cd)pyrene	0.35	1 30E-01	1.01E-05	4.60E-07			1.38E-07	6 30E-09	7.3E-01	5E-09
Naphthalene	1.1	1.30E-01	1 01E-05	1 44E-06	2.0E-02	7E-05	1 38E-07	198E-08		
Phenanthrene	1	1.30E-01	1.01E-05	1 31E-06			1 38E-07	1.80E-08		
Pyrene	1.2	1.30E-01	1.01E-05	1 58E-06	3.0E-01	5E-06	1.38E-07	2.16E-08		
Arsenic	17	3.00E-02	1.01E-05	5.15E-06	2.9E-04	2E-02	1.38E-07	7.06E-08	1 6E+00	1E-07
Beryllium*	1.3									
Cadmium	0 66	1.00E-03	1.01E-05	6.67E-09	2.5E-05	3E-04	1.38E-07	9.13E-11		
Chromium*	21									
Copper*	55									
Lead*	41									
Mercury*	0.28									
Nickel*	39]		
Thallium*	4.2								<u> </u>	
			Total Pathway	Hazard Index	>	2E-02]	Total Pathway	Risk>	2E-07

DERMAL CONTACT WITH SOIL

CS = Concentration of chemical in soil (mg/kg). See Table 12

ABS = Default value from Rags Part E (USEPA 2004c)

1 00E-06 CF = 0.000001 kg/mg - Conversion Factor

 $3\ 30E+03\quad SA=3,300\ sq\ cm\ -\ Skin\ Surface\ Area\ available\ for\ a\ Construction\ Worker,\ (USEPA\ 2004c)$

1 00E+00 ED = 1 yr - Exposure Duration for a Construction Worker, (assumed value)

2 50E+02 EF = 250 days/yr - Exposure Frequency for a Construction Worker, (assumed value)

7.00E+01 BW = 70 kg - Body Weight for an adult, (USEPA 1991)

3.50E+02 AIn = 350 days - Averaging Time for noncarcinogenic compounds, (assumed value)

2.555E+04 AI c = 25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

3 00E-01 AF = 0 3 mg/cm² - Soil to Skin Adherence Factor for a Construction Worker, (USEPA 2004c) 1 01E-05 HIF = (SA * EF * ED* AF / BW)* CF / (AI n)

1 38E-07 HIF = (SA* EF * ED * AF / BW) * CF / (AIc)

DAILY INTAKE = (CS * ABS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

NOTE

* BIEX compounds and inorganics excluded from dermal risk assessment (USEPA 2004c)

HIF--NONCARCINOGENIC-----

HIF--CARCINOGENIC---->

Inhalation of Chemicals in Fugitive Dust Reasonable Maximum Exposure (RME)

Post-Remediation Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

			Non	carcinogenic Eff	fects			Lifetime Card	inogenic Effects	
	RME	Human				Hazard	Human		Inhalation	
Chemicals	Conc	Intake Factor	Daily	Inhalation	Inhalation	Quotient	Intake Factor	Daily	SF (mg/kg-day) ⁻¹	Inhalation
of	(CS)	(HIF)	Intake	RfC	RfD	(HQ)	(HIF)	Intake	or	Risk
Potential Concern	mg/kg	kg/kg-day	mg/kg-day	mg/m³	mg/kg-day	unitless	kg/kg-day	mg/kg-day	UR (ug/m ³) ⁻¹	unitless
Acetone	0.32	1.65E-09	5.27E-10				2.25E-11	7.21E-12		
Benzene	0.015	1.65E-09	2.47E-11	3.0E-02	8.6E-03	3E-09	2 25E-11	3.38E-13	2.7E-02	9E-15
2-Butanone	0.072	1.65E-09	1.18E-10	1 0E+00	2.9E-01	4E-10	2 25E-11	1.62E-12		
o-Xylene	0.025	1 65E-09	4.11E-11	1.0E-01	2.9E-02	1E-09	2 25E-11	5.64E-13		
Acenaphthene	0.19	1.65E-09	3.13E-10				2 25E-11	4.28E-12		
Acenaphthylene	0.13	1 65E-09	2.14E-10				2.25E-11	2.93E-12		
Anthracene	03	1 65E-09	4.94E-10				2.25E-11	6.76E-12		
Benzo(a)anthracene (1, 2)	0.43	5.76E-09	2.48E-09				7.89E-11	3.39E-11	8.8E-05	3E-12
Benzo(b)fluoranthene (1,2)	0.36	5.76E-09	2.07E-09				7.89E-11	2.84E-11	8 8E-05	2E-12
Benzo(k)fluoranthene (1,2)	0.39	5.76E-09	2.25E-09				7.89E-11	3 08E-11	8 8E-06	3E-13
Benzo(g,h,i)perylene	0.48	1.65E-09	7 90E-10				2.25E-11	1.08E-11		
Benzo(a)pyrene (1, 2)	0.52	5.76E-09	3 00E-09				7.89E-11	4.10E-11	8.8E-04	4E-11
Chrysene (1, 2)	0.67	5.76E-09	3 86E-09				7.89E-11	5.29E-11	8.8E-07	5E-14
Dibenzo(a,h)anthracene (1, 2)	0.13	576E-09	7.49E-10				7 89E-11	1.03E-11	8.8E-04	9E-12
Fluoranthene	1.1	1.65E-09	1.81E-09				2 25E-11	2.48E-11		
Fluorene	0.31	1.65E-09	5.10E-10				2 25E-11	6.99E-12		
Indeno(1,2,3-cd)pyrene (1, 2)	0.35	5.76E-09	2.02E-09				7.89E-11	2.76E-11	8.8E-05	2E-12
Naphthalene(1)	1.1	5.76E-09	6.34E-09	3.0E-03		2E-06	7.89E-11	8.68E-11		
Phenanthrene	1	1.65E-09	1.65E-09				2.25E-11	2 25E-11		
Pyrene	1.2	1.65E-09	1.97E-09				2.25E-11	2.71E-11		
Arsenic (1, 2)	17	5.76E-09	9.79E-08				7.89E-11	1 34E-09	4.3E-03	6E-09
Beryllium (1, 2)	1.3	5.76E-09	7.49E-09	2.0E-05		4E-04	7.89E-11	1.03E-10	2.4E-03	2E-10
Cadmium (1, 2)	0.66	5.76E-09	3.80E-09				7.89E-11	5.21E-11	1.8E-03	9E-11
Chromium (1, 2, 3)	21	5.76E-09	1.21E-07	1.0E-04		1E-03	7.89E-11	1.66E-09	1.2E-02	2E-08
Copper	55	1.65E-09	9.05E-08				2.25E-11	1.24E-09		
Lead	41	1.65E-09	6.75E-08				2 25E-11	9.24E-10		
Mercury	0.28	1 65E-09	4.61E-10	3.0E-04	8.6E-05	5E-06	2 25E-11	6.31E-12		
Nickel	39	1.65E-09	6.42E-08				2 25E-11	8.79E-10		
T hallium	4.2	1.65E-09	6,91E-09				2.25E-11	9.47E-11		
	3,7720	and the same of th	Total Pathway I	Hazard Index	>	2E-03		Total Pathway	Risk>	3E-08

INHALATION DUE TO FUGITIVE DUST

CS = Concentration of chemical in soil (mg/kg) See I able 12.

1.24E+08 PEF = 124,000,000 m³/kg - Particulate Emission Factor, (IAC 2002)

2.00E+01 IR = 20 m3/day - Inhalation Rate of soil by a Construction Worker, (USEPA 1997a)

 $2\ 50E+02\quad EF=250\ days/yr-Exposure\ Frequency\ for\ a\ Construction\ Worker,\ (assumed\ value)$

 $1\ 00E \pm 00\quad ED = 1\ yr - Exposure\ Duration\ for\ a\ Construction\ Worker,\ (assumed\ value)$

7 00E+01 $\,$ BW = 70 kg - Body Weight for an adult, (USEPA 1991)

 $3.50E \pm 02$ $\,$ A I'n = 350 days - Averaging Time for noncarcinogenic compounds, (assumed value)

2.555E+04 AIc = 25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

1 65E-09 HIF = (IR * EF * ED) / (BW * PEF * AIn)

2 25E-11 HIF = (IR * EF * ED) / (BW * PEF * AIc)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

* FOR CARCINOGENIC PAHS, NAPHTHALENE, ARSENIC, BERYLLIUM, CADMIUM AND CHROMIUM:

HIF--NONCARCINOGENIC---->

HIF--NONCARCINOGENIC-----

HIF--CARCINOGENIC-----

HIF--CARCINOGENIC-

5.76E-09 HIF = (EF * ED) / (PEF * AIn)

7 89E-11 HIF = (EF * ED) / (PEF * AIc)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfC)

RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

NOTES:

- (1) Units for HIF are kg/m 3 and units for Daily Intake are mg/m 3 .
- (2) Unit Risk (UR) (ug/m³)⁻¹ is used to calculate carcinogenic risk
- (3) Chromium concentration is total chromium, RfC and slope factor are for chromium VI particulates

Inhalation of Chemicals in Vapor Phase Reasonable Maximum Exposure (RME)

Post-Remediation Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

		Volati-		Noncarcir	ogenic Effects	;			Lifetime Car	cinogenic Effects	
	RME	zation	Human					Human		Inhalation	
	Conc	Factor	Intake Factor	Daily	Inhalation	Inhalation	Hazard	Intake Factor	Daily	Slope Factor (SF)	Inhalation
Chemicals	(CS)	(VF')	(HIF)	Intake	RfC	RfD	Quotient	(HIF)	Intake	(mg/kg-day) ⁻¹	Risk
of	, ,		m³/kg-day OR	mg/kg-day OR			(HQ)	m³/kg-day OR	mg/kg-day OR	or Unit Risk (UR)	
Potential Concern	mg/kg	m³/kg	unitless *	mg/m³*	mg/m³*	mg/kg-day	unitless	unitless *	mg/m³ *	(ug/m ³) ⁻¹ *	unitless
Acetone	0.32	4.10E+02	2.04E-01	1.59E-04				2.80E-03	2.18E-06		
Benzene	0 015	7 30E+01	2.04E-01	4 19E-05	3.0E-02	8.6E-03	5E-03	2.80E-03	5.75E-07	2.7E-02	2E-08
2-Butanone	0 072	5.08E+02	2 04E-01	2 89E-05	1 0E+00	2.9E-01	1E-04	2.80E-03	3 96E-07		
o-Xylene	0.025	1.27E+02	2.04E-01	4.02E-05	1.0E-01	2.9E-02	1E-03	2.80E-03	5 50E-07		
Naphthalene *	1.1	1.02E+03	7.14E-01	7.71E-04	3.0E-03		3E-01	9.78E-03	1.06E-05		*****
		V162		Total Pathway Ha	zard Index	>	3E-01		Total Pathway R	isk>	2E-08

INHALATION OF CHEMICALS IN VAPOR PHASE

CS = Concentration of chemical in soil (mg/kg). See Table 12.

VF' = Volatization factor adjusted for agitaion See Iable 16.

2 00E+01 IR = 20 m3/day - Inhalation Rate of a Construction Worker, (USEPA 1997a)

2.50E+02 EF = 250 days/yr - Exposure Frequency for a Construction Worker, (assumed value)

1 00E+00 ED = 1 year - Exposure Duration for a Construction Worker, (assumed value)

7.00E+01 BW = 70 kg - Body Weight for an adult, (USEPA 1991)

3 50E+02 AIn = 350 days - Averaging Time for noncarcinogenic compounds, (assumed value)

2 555E+04 AIc=25,550 days-Averaging Time for carcinogenic compounds, (USEPA 1991)

2.04E-01 HIF = (IR * EF * ED) / (BW * ATn)

2 80E-03 HIF = (IR * EF * ED) / (BW * AIc) DAILY INI AKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

* FOR NAPHIHALENE:

HIF--NONCARCINOGENIC----->

HIF--CARCINOGENIC---->

HIF--NONCARCINOGENIC---->

HIF--CARCINOGENIC-----

7 14E-01 HIF = (EF * ED) / (AIn) 9 78E-03 HIF = (EF * ED) / (AIc)

DAILY INTAKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (INTAKE / RfC)

RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

Incidental Ingestion of Soil

Central Tendency (CT)

Post-Remediation Construction Worker The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

			***************************************	ogenic Effects			Lifetime C	arcinogenic Effe	ets
	Cī	Human	Honoatem	Semo Directa	Hazard	Human	2	Oral	
Chemicals	Conc	Intake Factor	Daily	Oral	Quotient	Intake Factor	Daily	Slope	
of	(CS)	(HIF)	Intake	RfD	(HQ)	(HIF)	Intake	Factor	Risk
Potential Concern	mg/kg	kg/kg-day	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day) ⁻¹	unitless
Acetone	0 32	5.10E-07	1.63E-07	1.0E+00	2E-07	3.49E-09	1 12E-09	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Benzene	0.015	5.10E-07	7.65E-09	4.0E-03	2E-06	3.49E-09	5 24E-11	5.5E-02	3E-12
2-Butanone	0.013	5.10E-07 5.10E-07	3.67E-08	2.0E+00	2E-08	3.49E-09	2.52E-10	J.JE 02	32 12
o-Xylene	0.072	5.10E-07 5.10E-07	1.28E-08	2.0E-01	6E-08	3.49E-09	8.74E-11		
Acenaphthene	0.023	5.10E-07 5.10E-07	9.69E-08	6.0E-01	2E-07	3.49E-09	6.64E-10		
Acenaphthylene	0.19	5.10E-07 5.10E-07	6.63E-08	0.0E-01	2E-07	3.49E-09	4.54E-10		
Anthracene	0.15	5.10E-07	1.53E-07	3.0E+00	5E-08	3.49E-09	1.05E-09		
Benzo(a)anthracene	0.3	5.10E-07 5.10E-07	2.19E-07	3.02.00	3 <u>L</u> -00	3.49E-09	1.50E-09	7.3E-01	1E-09
Benzo(a)anthracene Benzo(b)fluoranthene	0.43	5 10E-07 5 10E-07	1.84E-07			3.49E-09	1.26E-09	7.3E-01	9E-10
Benzo(k)fluoranthene	0.39	5 10E-07 5 10E-07	1.84E-07 1.99E-07			3.49E-09	1.36E-09	7 3E-02	1E-10
Benzo(g,h,i)perylene	0.39	5.10E-07 5.10E-07	2.45E-07			3 49E-09	1.68E-09	7 51.02	12.10
Benzo(g,n,1)perylene Benzo(a)pyrene	0.52	5.10E-07 5.10E-07	2.43E-07 2.65E-07			3.49E-09	1.82E-09	7.3E+00	1E-08
Chrysene	0.67	5 10E-07	3.42E-07			3.49E-09	2 34E-09	7.3E-03	2E-11
Dibenzo(a,h)anthracene	0.07	5 10E-07 5 10E-07	6.63E-08			3.49E-09	4.54E-10	7.3E+00	3E-09
Fluoranthene	1.1	5 10E-07	5.61E-07	4.0E-01	1E-06	3.49E-09	3.84E-09	7 32.00	32 03
Fluorene	0.31	5.10E-07 5.10E-07	1.58E-07	4.0E-01	4E-07	3.49E-09	1.08E-09		
Indeno(1,2,3-cd)pyrene	0.35	5.10E-07 5.10E-07	1.79E-07	4.0E-01	4E-07	3.49E-09	1.22E-09	7.3E-01	9E-10
Naphthalene	1.1	5.10E-07 5.10E-07	5.61E-07	2.0E-02	3E-05	3.49E-09	3.84E-09	7.52.01	,210
Phenanthrene	1	5.10E-07	5.10E-07	2.0102	32.03	3.49E-09	3.49E-09		
Pyrene	1.2	5.10E-07	6.12E-07	3.0E-01	2E-06	3.49E-09	4.19E-09		
Arsenic	17	5.10E-07	8 67E-06	3.0E-04	3E-02	3.49E-09	5.94E-08	1.5E+00	9E-08
Beryllium	13	5.10E-07	6 63E-07	5.0E-03	1E-04	3.49E-09	4.54E-09		
Cadmium	0.66	5.10E-07	3 37E-07	1 0E-03	3E-04	3 49E-09	2 31E-09		
Chromium*	21	5.10E-07	1.07E-05	2.0E-02	5E-04	3.49E-09	7 34E-08		
Copper	55	5.10E-07	2.81E-05	4.0E-02	7E-04	3.49E-09	1.92E-07		
Lead	41	5.10E-07	2.09E-05			3.49E-09	1.43E-07		
Mercury	0.28	5.10E-07	1.43E-07			3.49E-09	9.78E-10		
Nickel	39	5.10E-07	1.99E-05	2.0E-02	1E-03	3.49E-09	1.36E-07		
Thallium	4.2	5.10E-07	2.14E-06			3.49E-09	1.47E-08		
			Hazard Index	>	3E-02		Total Pathway	Risk>	1E-07

INCIDENTAL INGESTION OF SOIL

CS = Concentration of chemical in soil (mg/kg) See Table 12

1 00E-06 CF = 0 000001 kg/mg - Conversion Factor

 $1.00 \hbox{E+02} \quad IR = 100 \ mg/day - Ingestion \ Rate \ of soil for a \ Construction \ Worker, \ (USEPA \ 2002a)$

1.00E+00 ED = 1 yr - Exposure Duration for a Construction Worker, (assumed value)

1.25E+02 EF = 125 days/yr - Exposure Frequency for a Construction Worker, (assumed value)

7 00E+01 BW = 70 kg - Body Weight for an adult, (USEPA 1991)

1.75E+02 AIn = 175 days - Averaging I ime for noncarcinogenic compounds, (assumed value)

2.555E+04 AI c = 25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

5.00E-01 FI = 0.5 - Fraction Ingested, (Professional judgement)

5.10E-07 HIF = (IR * EF * ED * FI / BW) * CF / (AIn)

3.49E-09 HIF = (IR * EF * ED * FI / BW) * CF / (A1c)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

HIF--NONCARCINOGENIC---->

HIF--CARCINOGENIC-----

^{*} Chromium concentration is total chromium, RfD is for chromium VI particulates

Dermal Contact with Soil

Central Tendency (CT)

Post-Remediation Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

1					genic Effects			Lifetime Carci	nogenic Effects	
	Cī	Absorption	Human	INOHOAICHIO	Adjusted	Hazard	Human	Z.icimic outer	Adjusted	
Chemicals	Conc	Factor	Intake Factor	Daily	Dermal	Quotient	Intake Factor	Daily	Dermal	
of	1 1	(ABS)	(HIF)	Intake	RfD	(HQ)	(HIF)	Intake	Slope Factor	Risk
Potential Concern	(CS)	unitless	1 ' '	mg/kg-day	mg/kg-day	unitless	kg/kg-day	mg/kg-day	(mg/kg-day) ⁻¹	unitless
	mg/kg	unitiess	kg/kg-day	mg/kg-day	mg/kg-day	unitiess	kg/kg-uay	mg/kg-uay	(ang ing and)	diffeess
Acetone*	0.32									
Benzene*	0.015									
2-Butanone*	0.072									
o-Xylene*	0.025	4.407.01	2 2 277 0 6	0.445.00	C 0E 01	15.07	2 31E-08	570E-10		
Acenaphthene	0.19	1 30E-01 1 30E-01	3.37E-06 3.37E-06	8.32E-08 5.69E-08	6.0E-01	1E-07	2.31E-08	3.90E-10		
Acenaphthylene	0.13	1.30E-01	3.37E-06 3.37E-06	1.31E-07	3.0E+00	4E-08	2.31E-08 2.31E-08	8.99E-10		
Anthracene	0.3	1			3.05.700	42-08	2.31E-08	1.29E-09	7.3E-01	9E-10
Benzo(a)anthracene	0.43	1.30E-01	3.37E-06	1.88E-07			2.31E-08 2.31E-08	1.29E-09 1.08E-09	7.3E-01 7.3E-01	8E-10
Benzo(b)fluoranthene	0.36	1.30E-01	3.37E-06	1.58E-07			2.31E-08 2.31E-08	1.08E-09 1.17E-09	7.3E-01 7.3E-02	9E-11
Benzo(k)fluoranthene	0.39	1.30E-01	3.37E-06	1.71E-07			2.31E-08 2.31E-08	1.17E-09 1.44E-09	7.3E-02	9L-11
Benzo(g,h,i)perylene	0.48	1.30E-01	3.37E-06	2 10E-07			li.	1.56E-09	7.3E+00	1E-08
Benzo(a)pyrene	0 52	1.30E-01	3.37E-06	2 28E-07			2 31E-08	2.01E-09	7.3E+00 7.3E-03	1E-08 1E-11
Chrysene	0.67	1.30E-01	3.37E-06	2.93E-07			2 31E-08	3.90E-10	7.3E-03 7.3E+00	3E-09
Dibenzo(a,h)anthracene	0.13	1.30E-01	3.37E-06	5.69E-08		17.04	2 31E-08	1	7.3E±00	3E-09
Fluoranthene	1.1	1.30E-01	3.37E-06	4.82E-07	4.0E-01	1E-06	2.31E-08	3.30E-09		
Fluorene	0.31	1 30E-01	3.37E-06	1.36E-07	4.0E-01	3E-07	2.31E-08	9.29E-10	7.3E-01	8E-10
Indeno(1,2,3-cd)pyrene	0.35	1 30E-01	3.37E-06	1.53E-07			2.31E-08	1,05E-09	7.3E-01	8E-10
Naphthalene	11	1 30E-01	3 37E-06	4.82E-07	2.0E-02	2E-05	2.31E-08	3 30E-09		
Phenanthrene	1	1.30E-01	3 37E-06	4.38E-07			2.31E-08	3.00E-09		
Pyrene	12	1.30E-01	3 37E-06	5 25E-07	3.0E-01	2E-06	2 31E-08	3.60E-09	1 (1) 00	2E-08
Arsenic	17	3.00E-02	3.37E-06	1.72E-06	2.9E-04	6E-03	2 31E-08	1.18E-08	1.6E+00	2E-08
Beryllium*	1.3						2215.00	1.500.11		
Cadmium	0 66	1.00E-03	3.37E-06	2 22E-09	2.5E-05	9E-05	2.31E-08	1.52E-11		
Chromium*	21							1		
Copper*	55									
Lead*	41									
Mercury*	0.28									
Nickel*	39									
Thallium*	4.2	L	<u> </u>		<u> </u>			<u> </u>	<u></u>	4E 00
			Total Pathway	Hazard Index	>	6E-03	<u> </u>	Total Pathway	K18K>	4E-08

DERMAL CONTACT WITH SOIL

CS = Concentration of chemical in soil (mg/kg). See Table 12.

ABS = Default value from Rags Part E (USEPA 2004c).

1 00E-06 CF = 0.000001 kg/mg - Conversion Factor

 $3.30E+03 \quad SA=3,300 \; sq \; cm - Skin \; Surface \; Area \; available \; for \; a \; Construction \; Worker, \; (USEPA \; 2004c)$

1.00E+00 ED = 1 yr - Exposure Duration for a Construction Worker, (assumed value)

1.25E+02 EF = 125 days/yr - Exposure Frequency for a Construction Worker, (assumed value)

7~00E+01~BW = 70~kg - Body Weight for an adult, (USEPA 1991)

 $1.75E+02\quad A\, In=175 \,\, days - Averaging \,\, Iime \,\, for \, noncarcinogenic \,\, compounds, \,\, (assumed \,\, value)$

 $2.555E+04\quad AIc=25,550~days-Averaging~Iime~for~carcinogenic~compounds, (USEPA~1991)$

 $1\ 00E-01\quad AF=0\ 1\ mg/cm^2-Soil\ to\ Skin\ Adherence\ Factor\ for\ a\ Construction\ Worker,\ (USEPA\ 2004c)$

3 37E-06 HIF = (SA * EF * ED* AF / BW)* CF / (AIn)

2 31E-08 HIF = (SA* EF * ED * AF / BW) * CF / (AIc)

DAILY INTAKE = (CS * ABS * HIF) HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

NOTE:

HIF--NONCARCINOGENIC---->

HIF--CARCINOGENIC---->

* BTEX compounds and inorganics excluded from dermal risk assessment (USEPA 2004c)

Inhalation of Chemicals in Fugitive Dust Central Tendency (CT)

Post-Remediation Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640	North	Kingsbury	Portion

			Non	carcinogenic Ef	fects			Lifetime Card	inogenic Effects	
	CI	Human				Hazard	Human		Inhalation	
Chemicals	Conc	Intake Factor	Daily	Inhalation	Inhalation	Quotient	Intake Factor	Daily	SF (mg/kg-day) ⁻¹	Inhalation
of	(CS)	(HIF)	Intake	RfC	RfD	(HQ)	(HIF)	Intake	or	Risk
Potential Concern	mg/kg	kg/kg-day	mg/kg-day	mg/m³	mg/kg-day	unitless	kg/kg-day	mg/kg-day	UR (ug/m ³) ⁻¹	unitless
Acetone	0.32	9.87E-10	3.16E-10				6.76E-12	2.16E-12		
Benzene	0.015	9.87E-10	1.48E-11	3.0E-02	8.6E-03	2E-09	6.76E-12	1 01E-13	27E-02	3E-15
2-Butanone	0.072	9.87E-10	7.11E-11	1.0E+00	2.9E-01	2E-10	6.76E-12	4 87E-13		
o-Xylene	0.025	9.87E-10	2.47E-11	1.0E-01	2.9E-02	9E-10	6.76E-12	1.69E-13		
Acenaphthene	0.19	9.87E-10	1.88E-10				6.76E-12	1.29E-12		
Acenaphthylene	0 13	9.87E-10	1.28E-10				6 76E-12	8.:79E-13		
Anthracene	0.3	9.87E-10	2.96E-10				6.76E-12	2.03E-12		
Benzo(a)anthracene (1, 2)	0.43	5.76E-09	2.48E-09				3.95E-11	1.70E-11	8.8E-05	1E-12
Benzo(b)fluoranthene (1,2)	0.36	5.76E-09	2.07E-09				3.95E-11	1 42E-11	8.8E-05	1E-12
Benzo(k)fluoranthene (1,2)	0.39	5 76E-09	2.25E-09				3.95E-11	1.54E-11	8.8E-06	1E-13
Benzo(g,h,i)perylene	0.48	9 87E-10	4.74E-10				6.76E-12	3 25E-12		
Benzo(a)pyrene (1, 2)	052	5.76E-09	3 00E-09				3.95E-11	2.05E-11	8.8E-04	2E-11
Chrysene (1, 2)	0.67	5:76E-09	3 86E-09				3.95E-11	2.64E-11	8 8E-07	2E-14
Dibenzo(a,h)anthracene (1, 2)	0.13	5.76E-09	7 49E-10				3.95E-11	5.13E-12	8.8E-04	5E-12
Fluoranthene	11	9.87E-10	1 09E-09				6:76E-12	7.44E-12		
Fluorene	0.31	9.87E-10	3.06E-10				6:76E-12	2.10E-12		
Indeno(1,2,3-cd)pyrene (1, 2)	0.35	5.76E-09	2.02E-09				3.95E-11	1.38E-11	8.8E-05	1E-12
Naphthalene(1)	1.1	5.76E-09	6.34E-09	3 0E-03		2E-06	3.95E-11	4.34E-11		
Phenanthrene	1	9.87E-10	9.87E-10				6.76E-12	6:76E-12		
Pyrene	1.2	9.87E-10	1.18E-09				6.76E-12	8.12E-12		
Arsenic (1, 2)	. 17	5.76E-09	9.79E-08				3.95E-11	6.71E-10	4 3E-03	3E-09
Beryllium (1, 2)	1.3	5:76E-09	7 49E-09	2.0E-05		4E-04	3.95E-11	5.13E-11	2.4E-03	1E-10
Cadmium (1, 2)	0.66	5:76E-09	3.80E-09				3.95E-11	2.60E-11	1.8E-03	5E-11
Chromium (1, 2, 3)	21	5.76E-09	1.21E-07	1.0E-04		1E-03	3 95E-11	8.29E-10	1.2E-02	1E-08
Copper	55	987E-10	5.43E-08				6.76E-12	3.72E-10		
Lead	41	9 87E-10	4.05E-08				6.76E-12	2 77E-10		
Mercury	0.28	9.87E-10	2.76E-10	3.0E-04	8.6E-05	3E-06	6.76E-12	1.89E-12		
Nickel	39	9.87E-10	3 85E-08				6.76E-12	2.64E-10		
I hallium	4.2	9.87E-10	4.15E-09				6.76E-12	2.84E-11	<u></u>	
			Total Pathway I	Hazard Index	·>	2E-03		Total Pathway	Risk>	1E-08

INHALATION DUE TO FUGITIVE DUST

CS = Concentration of chemical in soil (mg/kg) See I able 12

1 24E+08 PEF = 124,000,000 m³/kg - Particulate Emission Factor, (IAC 2002)

1 20E+01 IR = 12 m³/day - Inhalation Rate of a Construction Worker, (USEPA 1997a)

 $1\ 25E+02\quad EF=125\ days/yr-Exposure\ Frequency\ for\ a\ Construction\ Worker,\ (assumed\ value)$

1 00E+00 ED = 1 yr - Exposure Duration for a Construction Worker, (assumed value)

7.00E+01 BW = 70 kg - Body Weight for an adult, (USEPA 1991)

1.75E+02 AIn = 175 days - Averaging I ime for noncarcinogenic compounds, (assumed value)

2 555E+04 AIc=25,550 days - Averaging Time for carcinogenic compounds, (USEPA 1991)

9 87E-10 HIF = (IR * EF * ED) / (BW * PEF * AIn)

6.76E-12 HIF = (IR * EF * ED) / (BW * PEF * AI c)

DAILY INTAKE = (CS * HIF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

* FOR CARCINOGENIC PAHS, NAPHTHALENE, ARSENIC, BERYLLIUM, CADMIUM AND CHROMIUM:

HIF--NONCARCINOGENIC-----

HIF--CARCINOGENIC----

HIF--NONCARCINOGENIC------> 5 76E-09 HIF = (EF * ED) / (PEF * AIn)

HQ (noncarcinogenic) = (INTAKE / RfC)

RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

NOTES:

- (1) Units for HIF are kg/m 3 and units for Daily Intake are mg/m 3
- (2) Unit Risk (UR) (ug/m 3)-1 is used to calculate carcinogenic risk.
- (3) Chromium concentration is total chromium, RfC and slope factor are for chromium VI particulates.

Inhalation of Chemicals in Vapor Phase

Central Tendency (CT)

Post-Remediation Construction Worker

The Former Willow Street Station Manufactured Gas Plant Site,

1640 North Kingsbury Portion

				10101	tor the real-goo	try rortion					
		Volati-		Noncarcii	ogenic Effects	1			Lifetime Car	cinogenic Effects	
	CT.	zation	Human					Human		Inhalation	
	Conc	Factor	Intake Factor	Daily	Inhalation	Inhalation	Hazard	Intake Factor	Daily	Slope Factor (SF)	Inhalation
Chemicals	(CS)	(VF')	(HIF)	Intake	RfC	RfD	Quotient	(HIF)	Intake	(mg/kg-day) ⁻¹	Risk
of			m³/kg-day OR	mg/kg-day OR			(HQ)	m³/kg-day OR	mg/kg-day OR	or Unit Risk (UR)	
Potential Concern	mg/kg	m³/kg	unitless *	mg/m³ *	mg/m³*	mg/kg-day	unitless	unitless *	mg/m³ *	(ug/m ³) ⁻¹ *	unitless
Acetone	0.32	2.90E+02	1.22E-01	1.35E-04				8 39E-04	9 26E-07		
Benzene	0.015	5.16E+01	1.22E-01	3.56E-05	3.0E-02	8 6E-03	4E-03	8 39E-04	2.44E-07	2.7E-02	7E-09
2-Butanone	0.072	3.60E+02	1.22E-01	2.45E-05	1 0E+00	2 9E-01	9E-05	8 39E-04	1.68E-07		
o-Xylene	0.025	8.98E+01	1.22E-01	3.41E-05	1.0E-01	2 9E-02	1E-03	8.39E-04	2.34E-07		
Naphthalene *	1.1	7.21E+02	7.14E-01	1.09E-03	3.0E-03		4E-01	4.89E-03	7.46E-06		
				Total Pathway Ha	zard Index	>	4E-01		Total Pathway R	isk>	7E-09

INHALATION OF CHEMICALS IN VAPOR PHASE

CS = Concentration of chemical in soil (mg/kg). See Table 12.

VF' = Volatization factor adjusted for agitaion See Table 16.

 $1\ 20E+01$ IR = $12\ m3/day$ - Inhalation Rate of a Construction Worker, (USEPA 1997a)

1 25E+02 EF = 125 days/yr - Exposure Frequency for a Construction Worker, (assumed value)

1 00E+00 ED = 1 year - Exposure Duration for a Construction Worker, (assumed value)

7.00E+01 BW = 70 kg - Body Weight for an adult, (USEPA 1991)

1 75E+02 AIn = 175 days - Averaging I ime for noncarcinogenic compounds, (assumed value)

2 555E+04 AIc=25,550 days-Averaging Time for carcinogenic compounds, (USEPA 1991)

1 22E-01 HIF = (IR * EF * ED) / (BW * AI n)

8 39E-04 HIF = (IR * EF * ED) / (BW * ATc)

DAILY INTAKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (INTAKE / RfD)

RISK (carcinogenic) = (INTAKE * SLOPE FACTOR)

HIF--NONCARCINOGENIC---->
HIF--CARCINOGENIC---->

* FOR NAPHTHALENE:

HIF--NONCARCINOGENIC----->

HIF--CARCINOGENIC-----

7 14E-01 HIF = (EF * ED) / (AIn)

4 89E-03 HIF = (EF * ED) / (AIc)

DAJLY INTAKE = (CS * HIF) / (VF)

HQ (noncarcinogenic) = (IN1AKE / RfC)

RISK (carcinogenic) = (INTAKE * UR * 1000 ug/mg)

Summary of Noncarcinogenic Hazard Indices and Carcinogenic Risks Post-Remediation Resident 1 and 2, Utility Worker and Construction Worker The Former Willow Street Station Manufactured Gas Plant Site, 1640 North Kingsbury Portion

			Hazard	Carcinogenic
Population	Medium	Exposure Pathway	Index	Risk
			(unitless)	(unitless)
Post-Rem	rediation Resident 1	- Reasonable Maximum	Exposure (RME	
dult and Child Resident	Subsurface Soil	Incidental Ingestion	4E-02	6E-06
	(3-10' bgs)	Dermal Contact	1E-04	2E-06
	(5 10 085)	Fugitive Dust	2E-04	7E-08
		Vapor Phase	5E-04	3E-09
		Total Risk>	4E-02	8E-06
_		L	(CIT)	, <u>-</u>
		esident 1 - Central Tend		9E-07
dult and Child Resident	Subsurface Soil	Incidental Ingestion	2E-02 2E-05	1E-07
	(3-10' bgs)	Dermal Contact		2E-08
		Fugitive Dust	2E-04	2E-08 2E-09
		Vapor Phase	1E-03	
		Total Risk>	2E-02	1E-06
Post-Rem	rediation Resident 2	- Reasonable Maximum	Exposure (RME	
Adult and Child Resident	Subsurface Soil	Incidental Ingestion	3E-02	5E-06
	(3'-extent bgs)	Dermal Contact	1E-04	2E-06
		Fugitive Dust	2E-04	7E-08
		Vapor Phase	2E-03	4E-09
	-	Total Risk>	4E-02	7E-06
I	ost-Remediation Re	esident 2 - Central Tend	ency (CT)	
Adult and Child Resident	Subsurface Soil	Incidental Ingestion	2E-02	8E-07
	(3'-extent bgs)	Dermal Contact	3E-05	1E-07
		Fugitive Dust	2E-04	2E-08
		Vapor Phase	3E-03	2E-09
		Total Risk>	2E-02	1E-06
Post-Remed	diation Utility Work	er - Reasonable Maxim	um Exposure (RM	1E)
Adult Utility Worker	Subsurface Soil	Incidental Ingestion	1E-01	8E-08
•	(3-10' bgs)	Dermal Contact	5E-02	5E-08
		Fugitive Dust	2E-03	2E-09
		Vapor Phase	3E-01	4E-09
***************************************		Total Risk>	5E-01	
		100011	2E-01	1E-07
	A.D Northern Tielle	•		1E-07
		ity Worker - Central Te	ndency (CT)	
	Subsurface Soil	ity Worker - Central Te	ndency (CT) 3E-02	8E-09
		ity Worker - Central Tell Incidental Ingestion Dermal Contact	3E-02 1E-02	8E-09 5E-09
	Subsurface Soil	Incidental Ingestion Dermal Contact Fugitive Dust	3E-02 1E-02 2E-03	8E-09 5E-09 1E-09
	Subsurface Soil	ity Worker - Central Te Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase	3E-02 1E-02 2E-03 3E-01	8E-09 5E-09 1E-09 2E-09
Adult Utility Worker	Subsurface Soil (3-10' bgs)	Ity Worker - Central Tell Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk>	3E-02 1E-02 2E-03 3E-01 4E-01	8E-09 5E-09 1E-09 2E-09
Adult Utility Worker Post-Remediat	Subsurface Soil (3-10' bgs) tion Construction W	ity Worker - Central Tell Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk>	3E-02 1E-02 2E-03 3E-01 4E-01	8E-09 5E-09 1E-09 2E-09 2E-08
Adult Utility Worker Post-Remediat	Subsurface Soil (3-10' bgs) tion Construction W Subsurface Soil	Ity Worker - Central Tell Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk> orker - Reasonable Max Incidental Ingestion	3E-02 1E-02 2E-03 3E-01 4E-01	8E-09 5E-09 1E-09 2E-09 2E-08
Adult Utility Worker Post-Remediat	Subsurface Soil (3-10' bgs) tion Construction W	Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk> orker - Reasonable Man Incidental Ingestion Dermal Contact	3E-02 1E-02 2E-03 3E-01 4E-01 dimum Exposure (2E-01 2E-02	8E-09 5E-09 1E-09 2E-09 2E-08 (RME)
Adult Utility Worker Post-Remediat	Subsurface Soil (3-10' bgs) tion Construction W Subsurface Soil	Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk> orker - Reasonable Max Incidental Ingestion Dermal Contact Fugitive Dust	3E-02 1E-02 2E-03 3E-01 4E-01 dimum Exposure (2E-01 2E-02 2E-03	8E-09 5E-09 1E-09 2E-09 2E-08 (RME) 1E-06 2E-07 3E-08
Adult Utility Worker Post-Remediat	Subsurface Soil (3-10' bgs) tion Construction W Subsurface Soil	Ity Worker - Central Tell Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk> orker - Reasonable Max Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase	3E-02 1E-02 2E-03 3E-01 4E-01 dimum Exposure (2E-01 2E-02 2E-03 3E-01	8E-09 5E-09 1E-09 2E-08 2E-08 (RME) 1E-06 2E-07 3E-08 2E-08
Adult Utility Worker Post-Remediat	Subsurface Soil (3-10' bgs) tion Construction W Subsurface Soil	Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk> orker - Reasonable Max Incidental Ingestion Dermal Contact Fugitive Dust	3E-02 1E-02 2E-03 3E-01 4E-01 dimum Exposure (2E-01 2E-02 2E-03	8E-09 5E-09 1E-09 2E-08 2E-08 (RME) 1E-06 2E-07 3E-08
Adult Utility Worker Post-Remediat Adult Construction Worker	Subsurface Soil (3-10' bgs) tion Construction W Subsurface Soil (3'-extent bgs)	Ity Worker - Central Tell Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk> orker - Reasonable Max Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase	3E-02 1E-02 2E-03 3E-01 4E-01 dimum Exposure (2E-01 2E-02 2E-03 3E-01 5E-01	8E-09 5E-09 1E-09 2E-08 2E-08 (RME) 1E-06 2E-07 3E-08 2E-08
Adult Utility Worker Post-Remediat Adult Construction Worker Post-R	Subsurface Soil (3-10' bgs) tion Construction W Subsurface Soil (3'-extent bgs)	Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk> Orker - Reasonable Max Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk>	3E-02 1E-02 2E-03 3E-01 4E-01 dimum Exposure (2E-01 2E-02 2E-03 3E-01 5E-01	8E-09 5E-09 1E-09 2E-08 2E-08 (RME) 1E-06 2E-07 3E-08 2E-08
Adult Utility Worker Post-Remediat Adult Construction Worker Post-R	Subsurface Soil (3-10' bgs) tion Construction W Subsurface Soil (3'-extent bgs)	Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk> Orker - Reasonable Max Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk>	3E-02 1E-02 2E-03 3E-01 4E-01 dimum Exposure (2E-01 2E-02 2E-03 3E-01 5E-01	8E-09 5E-09 1E-09 2E-08 2E-08 (RME) 1E-06 2E-07 3E-08 2E-08
Adult Utility Worker Post-Remediat Adult Construction Worker Post-R	Subsurface Soil (3-10' bgs) tion Construction W Subsurface Soil (3'-extent bgs) Remediation Construction Construction Construction W	Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk Total Risk Vapor Phase Total Risk Vapor Phase Total Risk Total Risk Total Risk Total Risk	3E-02 1E-02 2E-03 3E-01 4E-01 dimum Exposure (2E-01 2E-02 2E-03 3E-01 5E-01 Tendency (C T)	8E-09 5E-09 1E-09 2E-09 2E-08 (RME) 1E-06 2E-07 3E-08 2E-08 1E-06
Adult Utility Worker Post-Remediat Adult Construction Worker	Subsurface Soil (3-10' bgs) tion Construction W Subsurface Soil (3'-extent bgs) Remediation Construction Construction Construction W	Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk Incidental Ingestion Dermal Contact Fugitive Dust Vapor Phase Total Risk Total Risk Vapor Phase Total Risk Vapor Phase Total Risk Total Risk Total Risk Total Risk Total Risk Total Risk Dermal Contact Incidental Ingestion Dermal Contact	3E-02 1E-02 2E-03 3E-01 4E-01 dimum Exposure (2E-01 2E-02 2E-03 3E-01 5E-01 Tendency (CT)	8E-09 5E-09 1E-09 2E-09 2E-08 (RME) 1E-06 2E-07 3E-08 2E-08 1E-06

Figures
Tier 3 Risk Evaluation
The Former Willow Street Station
Manufactured Gas Plant Site,
1640 North Kingsbury Street

